



Questions

First: In the following Form window, if it is required to store entries from the user in variables. Define the corresponding Data Type for each input.

1.
2.
3.
4.



Second: In the following code, get the variable names and constants and their Data Types.

```
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
    Dim Radius As Single
    Const x As Single = 22 / 7
    Radius = TextBox1.Text
    Label2.Text = x * Radius ^ 2
End Sub
```

Third: In the following code, determine the cause of the displayed error

تخصيص مدخلات المستخدم لكل متغير

```
arabic = TextBox1.Text
computer = TextBox2.Text
```

يُصنّف ناتج مجموع المتغيرات

InvalidCastException was unhandled
Conversion from string "خمسة عشر درجة" to type 'Byte' is not valid.

The cause of errors :

.....

.....

تخصيص مدخلات المستخدم لكل متغير

```
arabic = TextBox1.Text
computer = TextBox2.Text
```

يُصنّف ناتج مجموع المتغيرات

OverflowException was unhandled
Arithmetic operation resulted in an overflow.

The cause of errors :

.....

.....

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Forth: In the following, determine the code to be written as indicated by the arrows.

Try



Catch ex As Exception



EndTry

Fifth: Determine the type of error in the following, and then perform the required error handling.

Code	error type	error handling
Din x As Single		
Const x As Single		

Sixth: When writing code the user needs to add specific comment that will not be executed, so the code must be preceded by:

1.
- OR
2.



Eight: Write the order of execution of Arithmetic operations that follow:

Order	Operation
()	Multiplications and divisions from left to right.
()	Parentheses starting from the inside out
()	Additions and subtractions from left to right
()	Exponentials.

Tenth: State whether the following statements are true (✓) or false (X)

1- One of the Rules for naming variables or constants in the program is: variable names must begin with a letter or a number.	()
2- Declaring variables is done using the Dim statement.	()
3- The variable of type Double takes the value True or False.	()
4- Variables of types (Integer & Long & Double) are used to store integers only.	()
5- User input is received through several controls including TextBox	()

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- 1- Less number of bytes means more computer's memory size and capacity for storing data. ()
- 2- Declaring variables means naming the bytes which have constant values in the computer memory and selecting their type. ()
- 3- When naming the variables , the variable name should begin with three character to show its type. ()
- 4- The variables types (Integer – Long - Short) are used for storing the numbers containing decimals. ()
- 5 - Not following the naming rules of constants and variables doesn't make any errors in the rules. ()
- 6 - It isn't allowed to use spaces in the variable name. ()
- 7 -There is no difference between the arithmetic operations and the assignment statement.()
- 8 -"Dim" is used for declaring the constants and variables. ()
- 9- The variables types (Decimal – Single – double) is used for storing the integer only. ()
- 10- When naming the variables in V. B .Net the variable name should express its content. ()
- 11- The data type (Boolean) is used for storing the data in the "data" form. ()
- 12- When writing the variable value in its declaration and skipping (=) , a default value is given to the variable which is (Zero) in the case of the numeric variables and an empty string value "" in the case of the string value. ()

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- 13- The conditional expression value may be "True " or " False" and that depend on the validity of the conditional relation. ()
- 14- -The data type (Char) is of integers. ()
- 15- 18- (vbcr1f) statement is used for typing comments in the code window. ()
- 16- The variable Double is used for storing the text data. ()
- 17- Dim H AS Boolean =True. ()
- 18- Tha variable (Bytes) takes the value (0:255). ()
- 19- Dim Single As integer ="70". ()
- 20- Dim Dim AS integer. ()
- 21- One of the advantages of VB.NET is dealing with different types of data.()
- 22- One of disadvantage of VB.NET is dealing with different types of data.()
- 23- All the data entered into the VB.NET program language are stored temporarily in the computer memory. ()
- 24- All types of data saved in the memory occupy the same storage space. ()
- 25- A good programmer is the one who improves the rationalization of storage space in the computer memory. ()
- 26- The value of the student" s total grades is classified within the integer data types. ()
- 27- The value of the student's name is classified in the Miscellaneous data types. ()
- 28- The value of the student gender "male" or "female" is classified within the Miscellaneous data types "Boolean." ()
- 29- Image of a student can be classified within the character data types. ()
- 30- The value of the employee's salary can be classified within non integer numeric data types. ()
- 31- Each data element stored in computer memory occupies a particular storage space and a particular range of values according to its data type. ()
- 32- The data element identifies the storage space it occupies in computer memory and knowing the minimum and the maximum for its value. ()

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- 33- The term variables in vb.net means stores in the computer memory which has type and name. ()
- 34- For each variable, VB.NET language necessitates a name, type and range of the data entered. ()
- 35- The declaration of variables in the language VB.NET helps rationalize the use of the computer memory. ()
- 36- Declaration of variables is a matter of formality, because VB.NET languages recognize the variables and determine the type automatically. ()
- 37- The following statement "Dim F_name As String" is to declare the name of a variable "String" and type "F_name". ()
- 38- The following data element "Dim F_name As String" is to declare the name of a variable "F_name" and type "String. ()
- 39- The declaration statement for variables is determined by the variable name and type. ()
- 40- The declaration statement for the variables is determined by the name, type and fixed value. ()
- 41- "55 City" variable name is a consider a wrong variable name because it begins with a number. ()
- 42- "55City" is considered a variable correct name. ()
- 43- "Name" is considered a wrong variable name because it is a reserved word. ()
- 44- "Name" is considered a correct name of a variable because it is made up of letters. ()
- 45- "Dim" is used to declare variables. ()
- 46- "Dim" is used to declare constants. ()
- 47- The command "Const" is used in the declaration of the variables. ()
- 48- The command "Const" is used in the declaration of the constants . ()
- 49- Constants in VB.NET language are stores of a computer memory which have the name and the value that does not change during the running of the program. ()
- 50- Constants in VB.NET language are stores of a computer memory which have name and value can change during the running of the program. ()
- 51- The error in the result of any equation is a Syntax Error. ()
- 52- The error in the result of any equation is a Logical Error. ()
- 53- Error that appears while you run or execute a VB.NET program is called Syntax Error. ()
- 54- Error that appears during the execution of VB.NET program is Run time Error. ()

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55- The final value of the variable X after the execution the following equation " $X = 3 + 2 * 4$ " is
(11). ()

56- The final value of the variable X after execution the following equation " $X = 3 + 2 * 4$ " is
(20). ()

Select the appropriate answer to complete each of the following sentences:

(1) The value of prices of desktop tools can be classified as..... data.

- a) integer b) non- integer c) miscellaneous

(2) The value of the names of the subjects can be classified as data.

- a) miscellaneous b) non- integer c) character

(3) The type of data element temporarily stored in the computer memory defines:

- a) storage space and the extent of its value
b) name and storage space
c) storage space and a storage value

(4) The right syntax to declare Salary variable is

- a) Dim Salary As Integer b) Dim Salary As Byte c)Dim Salary As Decimal

(5) The right syntax to declare the city variable is

- a) Dim City As String b) Dim City As Byte c)Dim City As Decimal

(6) The right syntax to declare the variable name F_Name is

- a) Dim F_Name As Integer b)Dim F_Name As Char c)Dim F_Name As Decimal

(7) The right syntax to declare the variable Gender is

- a) Dim Gender As Decimal b)Dim Gender As Integer c)Dim Gender As Boolean

(8) The right syntax to declare the variable name F_Name is

- a) Dim F_Name As Integer b) Dim F_Name As Char c)Din F_Name As Char

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- (9) The error that appears after running a program VB.NET language is called
a) Syntax Error b) logical Error c) Runtime Error
- (10) The error that appears while writing a code in a VB.NET language called..... .
a) Syntax Error b) Logical Error c) Run time Error
- (11) The error in the output result in language VB.NET code is called..... .
a) Syntax Error b) Logical Error c) Run time Error
- (12) The final output of the variable X for equation " $X = 3 + 2 * 4$ " is
a) 11 b) 24 c) 20
- (13) The final output of the variable Y for the equation " $Y = 16 - 12/4 + 2$ " is
a) 3 b) 11 c) 14
- (14) The declaration statement of a variable "Dim X As String", means the declaration about
a) A variable named X and type of character String.
b) Variable called string and its type X.
c) Unknown variable has no name and its type String.
- (15) The correct statement to declare a non-integer variable named Y is
a) Dim Y As Decimal b) Y As Decimal c) Dim Y = Decimal
- (16) Choose the correct name of the variable "name of the student":
a) st_name b) name c) Name**
- (17) Choose the correct name of the variable "address of the employee":
a) 5Cairo b) E_Address c) (Address)
- (18) The names of the following variables are correct except:
a) St_text b) Text c) _st_text
- (19) On declaration of a mathematical constant π , we use the code
a) Dim Pi As Single b) Dim Pi As Single = 3.14 c) Const Pi As Single = 3.14
- (20) On the declaration of constant gravity acceleration, we use the code
a) Dim g As Single b) Const g As Single = 9.81 c) Dim g As Single = 9.81

Computer Net Revision



(21) The declaration of variable number of family members C_Family with initial value of 2 is:

- a) Dim C_Family As Single = 2
- b) Const C_Family As Integer = 2
- c) Dim C_Family As Integer = 2

(22) If there is an error in the result of a rectangular area calculation in a program, this error is considered

- a) Syntax Error
- b) Logical Error
- c) Run time Error

(23) The error message that appears when you write the code "Dimension X As Byte", can be classified as

- a) Syntax Error
- b) Logical Error
- c) Run time Error

(24) The final output of the equation " $Y = 12 - 2 + 4 / 2$ " is

- a) 12
- b) 7
- c) 9

(25) The final output of the equation " $Y = 12 - (2 + 4) / 2$ " is

- a) 12
- b) 7
- c) 9



Answers

First: In the following Form window, if it is required to store entries from the user in variables. Define the corresponding Data Type for each input.

1. Text
2. Date
3. Boolean
4. Text



Second: In the following code, get the variable names and constants and their Data Types.

```
Private Sub Button1_Click(ByVal sender As Object, ByVal e As EventArgs) Handles Button1.Click
    Dim Radius As Single
    Const x As Single = 22 / 7
    Radius = TextBox1.Text
    Label2.Text = x * Radius ^ 2
End Sub
```

Variables: - Radius its data type is single

Constants: - X its data type is single

Third: In the following code, determine the cause of the displayed error

تخصيم مدخلات المستخدم لكل متغير

```
arabic = TextBox1.Text
computer = TextBox2.Text
```

InvalidCastException was unhandled
Conversion from string "خمسة عشر درجة" to type 'Byte' is not valid.

يتم ناتج مجموع المتغيرين

```
Label3.Text = arabic + computer
```

The cause of errors :

Runtime Error: The user enter letters instead of numbers

تخصيم مدخلات المستخدم لكل متغير

```
arabic = TextBox1.Text
computer = TextBox2.Text
```

OverflowException was unhandled
Arithmetic operation resulted in an overflow.

يتم ناتج مجموع المتغيرين

```
Label3.Text = arabic + computer
```

The cause of errors :

Runtime Error: The user enter a value more than the limit values for the variable

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Forth: In the following, determine the code to be written as indicated by the arrows.

Try



The Code that my a problem.

Catch ex As Exception



The Code which handle the error.

EndTry

Fifth: Determine the type of error in the following, and then perform the required error handling.

Code	error type	error handling
Din x As Single	Syntax	Dim
Const x As Single	Syntax	Give A value

Sixth: When writing code the user needs to add specific comment that will not be executed, so the code must be preceded by:

1.**Rem**.....

OR

2.



Eight: Write the order of execution of Arithmetic operations that follow:

Order	Operation
(3)	Multiplications and divisions from left to right.
(1)	Parentheses starting from the inside out
(4)	Additions and subtractions from left to right
(2)	Exponentials.

Tenth: State whether the following statements are true (✓) or false (X)

- 1- One of the Rules for naming variables or constants in the program is: variable names must begin with a letter or a number. (X)
- 2- Declaring variables is done using the Dim statement. (✓)
- 3- The variable of type Double takes the value True or False. (X)
- 4- Variables of types (Integer & Long & Double) are used to store integers only. (X)
- 5- User input is received through several controls including TextBox (✓)

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- 1- Less number of bytes means more computer's memory size and capacity for storing data. (×)
- 2- Declaring variables means naming the bytes which have constant values in the computer memory and selecting their type. (×)
- 3- When naming the variables , the variable name should begin with three character to show its type. (×)
- 4The variables types (Integer – Long - Short) are used for storing the numbers containing decimals. (×)
- 5 - Not following the naming rules of constants and variables doesn't make any errors in the rules. (×)
- 6 - It isn't allowed to use spaces in the variable name. (✓)
- 7 -There is no difference between the arithmetic operations and the assignment statement. (×)
- 8 -"Dim" is used for declaring the constants and variables. (×)
- 9- The variables types (Decimal – Single – double) is used for storing the integer only. (×)
- 10- When naming the variables in V. B .Net the variable name should express its content. (×)
- 11- The data type (Boolean) is used for storing the data in the "data" form. (×)
- 12- When writing the variable value in its declaration and skipping (=) , a default value is given to the variable which is (Zero) in the case of the numeric variables and an empty string value "" in the case of the string value. (✓)

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- 13- The conditional expression value may be "True " or " False" and that depend on the validity of the conditional relation. (✓)
- 14- -The data type (Char) is of integers. (×)
- 15- (vbcrlf) statement is used for typing comments in the code window. (×)
- 16- The variable Double is used for storing the text data. (×)
- 17- Dim H AS Boolean =True. (✓)
- 18- Tha variable (Bytes) takes the value (0:255). (✓)
- 19- Dim Single As integer ="70". (×)
- 20- Dim Dim AS integer. (×)
- 21- One of the advantages of VB.NET is dealing with different types of data.(✓)
- 22- One of disadvantage of VB.NET is dealing with different types of data.(×)
- 23- All the data entered into the VB.NET program language are stored temporarily in the computer memory. (✓)
- 24- All types of data saved in the memory occupy the same storage space. (×)
- 25- A good programmer is the one who improves the rationalization of storage space in the computer memory. (✓)
- 26- The value of the student" s total grades is classified within the integer data types. (×)
- 27- The value of the student's name is classified in the Miscellaneous data types. (×)
- 28- The value of the student gender "male" or "female" is classified within the Miscellaneous data types "Boolean." (✓)
- 29- Image of a student can be classified within the character data types. (×)
- 30- The value of the employee's salary can be classified within non integer numeric data types. (✓)
- 31- Each data element stored in computer memory occupies a particular storage space and a particular range of values according to its data type. (✓)
- 32- The data element identifies the storage space it occupies in computer memory and knowing the minimum and the maximum for its value. (✓)

Computer Net Revision



- 33- The term variables in vb.net means stores in the computer memory which has type and name. (✓)
- 34- For each variable, VB.NET language necessitates a name, type and range of the data entered. (✓)
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- 36- Declaration of variables is a matter of formality, because VB.NET languages recognize the variables and determine the type automatically. (×)
- 37- The following statement "Dim F_name As String" is to declare the name of a variable "String" and type "F_name". (×)
- 38- The following data element "Dim F_name As String" is to declare the name of a variable "F_name" and type "String". (✓)
- 39- The declaration statement for variables is determined by the variable name and type. (✓)
- 40- The declaration statement for the variables is determined by the name, type and fixed value. (×)
- 41- "55 City" variable name is a consider a wrong variable name because it begins with a number. (✓)
- 42- "55City" is considered a variable correct name. (×)
- 43- "Name" is considered a wrong variable name because it is a reserved word. (✓)
- 44- "Name" is considered a correct name of a variable because it is made up of letters. (×)
- 45- "Dim" is used to declare variables. (✓)
- 46- "Dim" is used to declare constants. (×)
- 47- The command "Const" is used in the declaration of the variables. (×)
- 48- The command "Const" is used in the declaration of the constants. (✓)
- 49- Constants in VB.NET language are stores of a computer memory which have the name and the value that does not change during the running of the program. (✓)
- 50- Constants in VB.NET language are stores of a computer memory which have name and value can change during the running of the program. (×)
- 51- The error in the result of any equation is a Syntax Error. (×)
- 52- The error in the result of any equation is a Logical Error. (✓)

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53- Error that appears while you run or execute a VB.NET program is called Syntax Error. (×)

54- Error that appears during the execution of VB.NET program is Run time Error. (✓)

55- The final value of the variable X after the execution the following equation " $X = 3 + 2 * 4$ " is (11). (✓)

56- The final value of the variable X after execution the following equation " $X = 3 + 2 * 4$ " is (20). (×)

Select the appropriate answer to complete each of the following sentences:

(1) The value of prices of desktop tools can be classified as..... data.

- a) integer b) non- integer c) miscellaneous

(2) The value of the names of the subjects can be classified as data.

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(3) The type of data element temporarily stored in the computer memory defines:

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(4) The right syntax to declare Salary variable is

- a) Dim Salary As Integer b) Dim Salary As Byte c)Dim Salary As Decimal

(5) The right syntax to declare the city variable is

- a) Dim City As String b) Dim City As Byte c)Dim City As Decimal

(6) The right syntax to declare the variable name F_Name is

- a) Dim F_Name As Integer b)Dim F_Name As Char c)Dim F_Name As Decimal

(7) The right syntax to declare the variable Gender is

- a) Dim Gender As Decimal b)Dim Gender As Integer c)Dim Gender As Boolean

(8) The right syntax to declare the variable name F_Name is

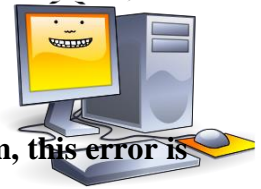
- a) Dim F_Name As Integer b) Dim F_Name As Char c)Din F_Name As Char

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- (9) The error that appears after running a program VB.NET language is called.....
a) Syntax Error b) logical Error c) Runtime Error
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a) Dim Pi As Single b) Dim Pi As Single = 3.14 c) Const Pi As Single = 3.14
- (20) On the declaration of constant gravity acceleration, we use the code
a) Dim g As Single b) Const g As Single = 9.81 c) Dim g As Single = 9.81
- (21) The declaration of variable number of family members C_Family with initial value of 2 is:
a) Dim C_Family As Single = 2
b) Const C_Family As Integer = 2
c) Dim C_Family As Integer = 2

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(22) If there is an error in the result of a rectangular area calculation in a program, this error is considered

a) Syntax Error

b) Logical Error

c) Run time Error

(23) The error message that appears when you write the code "Dimension X As Byte", can be classified as

a) Syntax Error

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(24) The final output of the equation " $Y = 12 - 2 + 4 / 2$ " is

a) 12

b) 7

c) 9

(25) The final output of the equation " $Y = 12 - (2 + 4) / 2$ " is

a) 12

b) 7

c) 9