

```
In [1]: print("This is 1st Chapter - Introduction")
```

This is 1st Chapter - Introduction

```
In [2]: print("This is multi line code execution")
print(1234)
```

This is multi line code execution
1234

```
In [3]: print("if statement - ")
if 5>2:
    print("Five is greater than two")
```

if statement -
Five is greater than two

```
In [4]: print("if statement - ")
if 5>2:
    print("Five is greater than two")
    print("This is the second line under if statement")

print("This line is not under IF statement.It is out of IF statement. ")
```

if statement -
Five is greater than two
This is the second line under if statement
This line is not under IF statement.It is out of IF statement.

```
In [5]: print("if statement - ")
if 5>9:
    print("Five is greater than two")
    print("This is the second line under if statement")

print("This line is not under IF statement.It is out of IF statement. ")
```

if statement -
This line is not under IF statement.It is out of IF statement.

```
In [6]: print("if statement - ")
if 5>9:
    print("Five is greater than two")

print("Now This line is not under if statement")
print("This line is not under IF statement.It is out of IF statement. ")
```

if statement -
Now This line is not under if statement
This line is not under IF statement.It is out of IF statement.

```
In [7]: print("Nested - IF statement - ")
        if 5>9:
            print("Five is greater than two")
            print("This line is under outer if statement")
            if 7>6:
                print("seven is greater than six.")
                print("This line is under inner if statement")

        print("Now This line is not under if statement")
        print("This line is not under IF statement.It is out of IF statement. ")
```

Nested - IF statement -
Now This line is not under if statement
This line is not under IF statement.It is out of IF statement.

```
In [8]: print("Nested - IF statement - ")
        if 5>3:
            print("Five is greater than two")
            print("This line is under outer if statement")
            if 7>6:
                print("seven is greater than six.")
                print("This line is under inner if statement")

        print("Now This line is not under if statement")
        print("This line is not under IF statement.It is out of IF statement. ")
```

Nested - IF statement -
Five is greater than two
This line is under outer if statement
seven is greater than six.
This line is under inner if statement
Now This line is not under if statement
This line is not under IF statement.It is out of IF statement.

```
In [9]: print("Nested - IF statement - ")
        if 5>9:
            print("Five is greater than two")
            print("This line is under outer if statement")
            if 7>8:
                print("seven is greater than six.")
                print("This line is under inner if statement")

        print("Now This line is not under if statement")
        print("This line is not under IF statement.It is out of IF statement. ")
```

Nested - IF statement -
Now This line is not under if statement
This line is not under IF statement.It is out of IF statement.

```
In [10]: print("Nested - IF statement - ")
         if 5>4:
             print("Five is greater than two")
             print("This line is under outer if statement")
             if 7>8:
                 print("seven is greater than six.")
                 print("This line is under inner if statement")

         print("Now This line is not under if statement")
         print("This line is not under IF statement.It is out of IF statement. ")
```

Nested - IF statement -
Five is greater than two
This line is under outer if statement
Now This line is not under if statement
This line is not under IF statement.It is out of IF statement.

```
In [11]: print("Nested - IF statement - ")
         if 5>4:
             print("Five is greater than two")
             print("This line is under outer if statement")
             if 7>6:
                 print("Seven is greater than six.")
                 print("This line is under inner if statement")

             print("Now This line is under outer if statement")
         print("This line is not under IF statement.It is out of IF statement. ")
```

Nested - IF statement -
Five is greater than two
This line is under outer if statement
Seven is greater than six.
This line is under inner if statement
Now This line is under outer if statement
This line is not under IF statement.It is out of IF statement.

```
In [12]: print("Nested - IF statement - ")
         if 5>4:
             print("Five is greater than two")
             print("This line is under outer if statement")
             if 7>8:
                 print("Seven is greater than six.")
                 print("This line is under inner if statement")

             print("Now This line is under outer if statement")
         print("This line is not under IF statement.It is out of IF statement. ")
```

Nested - IF statement -
Five is greater than two
This line is under outer if statement
Now This line is under outer if statement
This line is not under IF statement.It is out of IF statement.

```
In [13]: print("Nested - IF statement - ")
         if 5>6:
             print("Five is greater than two")
             print("This line is under outer if statement")
             if 7>2:
                 print("Seven is greater than six.")
                 print("This line is under inner if statement")

             print("Now This line is under outer if statement")
         print("This line is not under IF statement.It is out of IF statement. ")
```

Nested - IF statement -

This line is not under IF statement.It is out of IF statement.

```
In [14]: print("Single line comment ")
         if 5>3:
             #This is the comment
             print("Five is greater than two")
             print("This line is under outer if statement")
             if 7>2:
                 print("Seven is greater than six.")
                 #print("This line is under inner if statement")

             print("Now This line is under outer if statement")
         print("This line is not under IF statement.It is out of IF statement. ")
```

Single line comment

Five is greater than two

This line is under outer if statement

Seven is greater than six.

Now This line is under outer if statement

This line is not under IF statement.It is out of IF statement.

```
In [15]: print("Multi line comment ")
         if 5>3:
             """
             This is the comment
             print("Five is greater than two")
             print("This line is under outer if statement")
             """

             if 7>2:
                 print("Seven is greater than six.")
                 #print("This line is under inner if statement")

             print("Now This line is under outer if statement")
         print("This line is not under IF statement.It is out of IF statement. ")
```

Multi line comment

Seven is greater than six.

Now This line is under outer if statement

This line is not under IF statement.It is out of IF statement.

```
In [16]: print("Variable")
varA = 5
varB = "Sharmin Akhter"
varC = 'Sharmin Akhter'
print(varA)
print(varB)
print(varC)
```

Variable
5
Sharmin Akhter
Sharmin Akhter

```
In [17]: print("Variable")
varA = 5
varB = "Sharmin Akhter"
varC = 'Sharmin Akhter'
varD = 4.98
varE = False
print(varA)
print(varB)
print(varC)
print(varD)
print(varE)
```

Variable
5
Sharmin Akhter
Sharmin Akhter
4.98
False

```
In [18]: print("Variable Type")
varA = 5
varB = "Sharmin Akhter"
varC = 'Sharmin Akhter'
varD = 4.98
varE = False
print(type(varA))
print(type(varB))
print(type(varC))
print(type(varD))
print(type(varE))
```

Variable Type
<class 'int'>
<class 'str'>
<class 'str'>
<class 'float'>
<class 'bool'>

```
In [19]: print("Variable VALUE & Type")
varA = 5
varB = "Sharmin Akhter"
varC = 'Sharmin Akhter'
varD = 4.98
varE = False
print("Value of varA is = ",varA)
print("Type of varA is = ",type(varA))
print("Value of varA is = ",varB)
print("Type of varA is = ",type(varB))
print("Value of varA is = ",varC)
print("Type of varA is = ",type(varC))
print("Value of varA is = ",varD)
print("Type of varA is = ",type(varD))
print("Value of varA is = ",varE)
print("Type of varA is = ",type(varE))
```

```
Variable VALUE & Type
Value of varA is = 5
Type of varA is = <class 'int'>
Value of varA is = Sharmin Akhter
Type of varA is = <class 'str'>
Value of varA is = Sharmin Akhter
Type of varA is = <class 'str'>
Value of varA is = 4.98
Type of varA is = <class 'float'>
Value of varA is = False
Type of varA is = <class 'bool'>
```

```
In [20]: print("Variable ")
varA = 5
varB = "Sharmin Akhter"
varC = 'Sharmin Akhter'
varD = 4.98
varE = False
print(varA,varB,varC,varD,varE)
```

```
Variable
5 Sharmin Akhter Sharmin Akhter 4.98 False
```

```
In [21]: print("TYPE CASTING")
varA = 15
print("Value of varA before type casting = ", varA)
print("Type of varA before type casting = ", type(varA))

varB = float(varA)
print("Value of varB before type casting = ", varB)
print("Type of varB before type casting = ", type(varB))

varC = str(varA)
print("Value of varC before type casting = ", varC)
print("Type of varC before type casting = ", type(varC))
```

TYPE CASTING

Value of varA before type casting = 15
Type of varA before type casting = <class 'int'>
Value of varB before type casting = 15.0
Type of varB before type casting = <class 'float'>
Value of varC before type casting = 15
Type of varC before type casting = <class 'str'>

```
In [22]: print("CASE SENSITIVE")
varA = 15
vara = "sharmin"
print("Value of varA = ", varA)
print("Type of varA = ", type(varA))
print("Value of vara = ", vara)
print("Type of vara = ", type(vara))
```

CASE SENSITIVE

Value of varA = 15
Type of varA = <class 'int'>
Value of vara = sharmin
Type of vara = <class 'str'>

```
In [23]: print("DECLARING AND INITIALIZING MULTIPLE VARIBALE AT ONCE")

varA, varB, varC = 15, "sharmin", 20.34

print("Value of varA = ", varA)
print("Type of varA = ", type(varA))
print("Value of varB = ", varB)
print("Type of varB = ", type(varB))
print("Value of varC = ", varC)
print("Type of varC = ", type(varC))
```

DECLARING AND INITIALIZING MULTIPLE VARIBALE AT ONCE

Value of varA = 15
Type of varA = <class 'int'>
Value of varB = sharmin
Type of varB = <class 'str'>
Value of varC = 20.34
Type of varC = <class 'float'>

In [24]: `print("MULTIPLE VARIABLE HAVING SAME VALUE")`

```
varA = varB = varC = "Sharmin"
```

```
print("Value of varA = ", varA)
print("Type of varA = ", type(varA))
print("Value of varB = ", varB)
print("Type of varB = ", type(varB))
print("Value of varC = ", varC)
print("Type of varC = ", type(varC))
```

```
MULTIPLE VARIABLE HAVING SAME VALUE
Value of varA = Sharmin
Type of varA = <class 'str'>
Value of varB = Sharmin
Type of varB = <class 'str'>
Value of varC = Sharmin
Type of varC = <class 'str'>
```

In [25]: `print("ADDITION OF VARIABLE ")`

```
varA = 3
varB = 4
varC = 7
print("Value of varA = ", varA)
print("Type of varA = ", type(varA))
print("Value of varB = ", varB)
print("Type of varB = ", type(varB))
print("Value of varC = ", varC)
print("Type of varC = ", type(varC))
print(varA,varB,varC)
print("Addition of them = " , varA+varB+varC)
```

```
ADDITION OF VARIABLE
Value of varA = 3
Type of varA = <class 'int'>
Value of varB = 4
Type of varB = <class 'int'>
Value of varC = 7
Type of varC = <class 'int'>
3 4 7
Addition of them = 14
```



```
In [27]: print("ADDTION OF VARIABLE ")

varA = 3
varB = 4.90
varC = '7'
print("Value of varA = ", varA)
print("Type of varA = ", type(varA))
print("Value of varB = ", varB)
print("Type of varB = ", type(varB))
print("Value of varC = ", varC)
print("Type of varC = ", type(varC))
print(varA,varB,varC)
print("Addition of them = " , varA+varB+int(varC))
```

```
ADDTION OF VARIABLE
Value of varA = 3
Type of varA = <class 'int'>
Value of varB = 4.9
Type of varB = <class 'float'>
Value of varC = 7
Type of varC = <class 'str'>
3 4.9 7
Addition of them = 14.9
```

```
In [28]: print("ADDTION OF VARIABLE ")

varA = 3
varB = 4.90
varC = '7'
print("Value of varA = ", varA)
print("Type of varA = ", type(varA))
print("Value of varB = ", varB)
print("Type of varB = ", type(varB))
print("Value of varC = ", varC)
print("Type of varC = ", type(varC))
print(varA,varB,varC)
print("Addition of them = " , varA+int(varB)+int(varC))
```

```
ADDTION OF VARIABLE
Value of varA = 3
Type of varA = <class 'int'>
Value of varB = 4.9
Type of varB = <class 'float'>
Value of varC = 7
Type of varC = <class 'str'>
3 4.9 7
Addition of them = 14
```

```
In [29]: print("ADDITION OF VARIABLE with ASCII VALUE")

varA = 3
varB = 4.90
varC = 'a'
print("Value of varA = ", varA)
print("Type of varA = ", type(varA))
print("Value of varB = ", varB)
print("Type of varB = ", type(varB))
print("Value of varC = ", varC)
print("Type of varC = ", type(varC))
print(varA,varB,varC)
print("Addition of them = " , varA+int(varB)+ord(varC))
```

```
ADDITION OF VARIABLE with ASCII VALUE
Value of varA = 3
Type of varA = <class 'int'>
Value of varB = 4.9
Type of varB = <class 'float'>
Value of varC = a
Type of varC = <class 'str'>
3 4.9 a
Addition of them = 104
```

```
In [30]: print("ADDITION OF VARIABLE with ASCII VALUE")

varA = 3
varB = 4.90
varC = 'A'
print("Value of varA = ", varA)
print("Type of varA = ", type(varA))
print("Value of varB = ", varB)
print("Type of varB = ", type(varB))
print("Value of varC = ", varC)
print("Type of varC = ", type(varC))
print(varA,varB,varC)
print("Addition of them = " , varA+int(varB)+ord(varC))
```

```
ADDITION OF VARIABLE with ASCII VALUE
Value of varA = 3
Type of varA = <class 'int'>
Value of varB = 4.9
Type of varB = <class 'float'>
Value of varC = A
Type of varC = <class 'str'>
3 4.9 A
Addition of them = 72
```

```
In [31]: print("PRINTING ASCII VALUE OF CHARACTER & NUMBER")
varA = "3"
varB = "A"
varC = 'a'
print("Value of varA = ", varA)
print("Type of varA = ", type(varA))
print("ASCII value of varA = ", ord(varA))
print("Value of varB = ", varB)
print("Type of varB = ", type(varB))
print("ASCII value of varB = ", ord(varB))
print("Value of varC = ", varC)
print("Type of varC = ", type(varC))
print("ASCII value of varC = ", ord(varC))
```

```
PRINTING ASCII VALUE OF CHARACTER & NUMBER
Value of varA = 3
Type of varA = <class 'str'>
ASCII value of varA = 51
Value of varB = A
Type of varB = <class 'str'>
ASCII value of varB = 65
Value of varC = a
Type of varC = <class 'str'>
ASCII value of varC = 97
```

```
In [32]: print("STRING CONCATINATION")
varA = "THIS IS SHARMIN. "
varB = "I AM DOING MY ASSIGNMENT."
varC = 'TODAY IS 26 JUNE, 2023.'
print("Value of varA = ", varA)
print("Type of varA = ", type(varA))
print("Value of varB = ", varB)
print("Type of varB = ", type(varB))
print("Value of varC = ", varC)
print("Type of varC = ", type(varC))
print("\n" + varA + " " + varB + " " + varC)
```

```
STRING CONCATINATION
Value of varA = THIS IS SHARMIN.
Type of varA = <class 'str'>
Value of varB = I AM DOING MY ASSIGNMENT.
Type of varB = <class 'str'>
Value of varC = TODAY IS 26 JUNE, 2023.
Type of varC = <class 'str'>

THIS IS SHARMIN. I AM DOING MY ASSIGNMENT. TODAY IS 26 JUNE, 2023.
```

```
In [ ]:
```