



Brain International School

Vikas Puri, New Delhi

ASSIGNMENT NO. 1

SUBJECT: COMPUTER SCIENCE

CLASS-XII

APRIL,2025

CH 1: Python Revision Tour - 1

Q1. What are tokens in Python? How many types of tokens are allowed in Python? Exemplify your answer.

Q2. What are operators ? What is their function? Give examples of some unary and binary operators.

Q3. What is the difference between implicit type conversion and explicit type conversion?

Q4. Rewrite the below code in python after removing all syntax error(s). Underline each correction done in the code.

```
30 = To
for K in range(0,To)
IF k%4 == 0:
    print(K * 4)
Else:
    print(K+3).
```

Q5. Predict the output of the following code fragments:

```
x = 10
y = 0
while x > y:
    print (x, y)
    x = x - 1
    y = y + 1
```

Q6. Predict the output of the following code fragments:

```
for z in range(-500, 500, 100):
    print (z)
```

Q7. Predict the output of the following code fragments:

```
x ='apple, pear, peach, grapefruit'
y = x.split(', ')
for z in y:
    if z < 'm':
        print(str.lower(z))
    else:
        print(str.upper(z))
```

Q8. Write a program that reads an integer N from the keyboard computes and displays the sum of the numbers from N to (2 * N) if N is nonnegative. If N is a negative number, then it's the sum of the numbers from (2 * N) to N. The starting and ending points are included in the sum.

CH 2: Python Revision Tour - 2

Q1. What is the difference between a list and a tuple ?

Q2. Write code to do the following :

- a. Define a variable named states that is an empty list.
- b. Add 'Delhi' to the list.
- c. Now add 'Punjab' to the end of the list.
- d. Define a variable states2 that is initialized with 'Rajasthan', 'Gujarat', and 'Kerala'.
- e. Add 'Odisha' to the beginning of the list states2.
- f. Add 'Tripura' so that it is the third state in the list states2.
- g. Add 'Haryana' to the list states2 so that it appears before 'Gujarat'. Do this as if you DO NOT KNOW where 'Gujarat' is in the list. Hint. See what states2.index("Rajasthan") does. What can you conclude about what listname.index(item) does ?
- h. Remove the 5th state from the list states2 and print that state's name.

Q3. What is the difference between (30) and (30,) ?

Q4. What will be the output produced by following code fragments ?

```
x = "hello" + \
    "to Python" + \
    "world"
for char in x :
    y = char
    print(y, ':', end=" ")
```

Q5. Predict the output of the following code snippet ?

```
Numbers = [9, 18, 27, 36]
for Num in Numbers :
    for N in range(1, Num % 8) :
        print(N, "#", end=" ")
    print()
```

Q6. Write a python program that creates a tuple storing first 9 terms of Fibonacci series.

CH 3 : Working with functions

Q1. A program having multiple functions is considered better designed than a program without any functions. Why?

Q2. Explain with a code example the usage of default arguments and keyword arguments.

Q3. What is the difference between local and global variable?

Q4. Find and write the output of the following python code:

```
def Call(P = 40, Q = 20):
    P = P + Q
    Q = P - Q
    print(P, '@', Q)
    return P
R = 200
S = 100
R = Call(R, S)
print(R, '@', S)
S = Call(S)
print(R, '@', S)
```