

HOLIDAY HOMEWORK- CLASS 12

COMPUTER SCIENCE

1. How are keywords different from identifiers ?
2. Out of the following, find those identifiers, which cannot be used for naming Variables or Functions in a Python program :
Price*Qty, class, For, do, 4thCol , totally , Row3l, _Amount
3. Describe the concepts of block or suite. What is indentation and how is it related to block / suite ?
4. What are immutable and mutable types ? List immutable and mutable types of Python.
5. Predict the outputs of the following programs :

(a)

```
count = 0
while count < 10:
    print ('Hello')
    count += 2
```

(b)

```
x = 10
y = 0
while x > y:
    print(x, y)
    x = x - 1
    y = y + 2
```

(c)

```
keepgoing = True
x = 100
while keepgoing:
    print(x)
    x = x - 10
    if x < 50:
        keepgoing = False
```

(d)

```
for x in [1,2,3,4,5]:
    print(x)
```

(e)

```
for p in range(1,10,2):
    print(p)
```

(f)

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

(g)

```
for x in 'lamp':
    print(str.upper(x))
```

```
(h)
x = 'one'
y = 'two'
counter = 0
while counter <len(x):
    print(x[counter], y[counter])
    counter += 1
```

```
(i)
x = "apple, pear, peach"
y = x.split(", ")
for z in y :
    print(z)
```

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

```
(k)
for Name in ['Jayes', 'Ramya', 'Taruna', 'Suraj'] :
    print (Name)
    if Name[0] == 'T' :
        break
else :
    print ('Finished! ')
    print ('Got it! ')
```

6. Write a program to print one of the words negative, zero, or positive, according to whether variable x is less than zero, zero, or greater than zero, respectively.
7. Write a program that returns True if the input number is an even number, False otherwise.
8. Write a Python program that calculates and prints the number of seconds in a year.
9. Write a Python program that accepts two integers from the user and prints a message saying if firstnumber is divisible by second number or if it is not.
10. Write a program that reads a date as an integer in the format MMDDYYYY. The program will call a function that prints print out the date in the format <Month Name><day>, <year>.

Sample run :

Enter date : 12252019

December 25, 2019

11. Write a Python script that traverses through an input string and prints its characters in different lines - two characters per line.

12. How is `del D` and `del D[<key>]` different from one another if `D` is a dictionary ?

13. Predict the output of the following code snippet?

(a)

```
arr = [1, 2, 3, 4, 5, 6]
for i in range(1, 6):
    arr[i - 1] = arr[i]
for i in range(0, 6):
    print(arr[i], end = " ")
```

(b)

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

(c)

```
my_dict={}
my_dict[(1,2,4)] = 8
my_dict[(4,2,1)] =10
my_dict[(1,2)] =12
sum = 0
for k in my_dict:
    sum += my_dict[k]
print (sum)
print(my_dict)
```

14. Write a short Python code segment that prints the longest word in a list of words.

15. a Python program that creates a tuple storing first 9 terms of Fibonacci series.

MATHEMATICS

➤ **Thorough revision on the following chapters of XI**

1. Trigonometric functions

2. Limits and derivatives

3. Three dimensional geometry

4. **Straight lines**
5. **Conic sections**
6. **Probability**

- **Study all the formulae in the above chapters and write systematically in a small book which can be conveniently used further.**
- **To work out problems based on rules of differentiation and fundamental derivatives of the chapter " limits and derivatives"-miscellaneous exercise.**
- **To go through the summary of the chapter RELATIONS AND FUNCTIONS and to note down in the formulae book.**
- **To refer thecbse website to know about the changes in the weightage of the topics as per the new pattern implementation and to understand the projects or activities to be carried out for 20 marks.Try to do any two activities .**

हिंदी अवकाशकालीन गृहकार्य - कक्षा 12

1) पत्र लेखन 2) निबंध लेखन 3) आलेख 4) पुस्तक समीक्षा

ENGLISH

1. Your school is organizing an inter school debate competition. Write a notice for the school notice board to inform the students about the competition. You are Sunita, Cultural captain.
2. You are Reema, secretary of Eco club. Design a poster to create awareness about the needs to conserve water.
3. Recently, you have attended a workshop for creative writing organized by your school. Write a report on the same to be published in the newspaper in 150-200 words.
4. You are Mamta / Mohan. You find corruption, the biggest impediment in the development of our nation. You strongly believe that youth can play a very important role in fighting the menace of corruption. Write an article on the 'Role of youth in fighting corruption'-150-200 words.
5. Collect ten classified advertisements from any English newspaper.

Chemistry

1. Record completion.
2. Solution-exercise questions.
3. Investigatory project.

Physics

1. Record completion(15 experiments+6 activities)
2. Investigatory project.
3. Ray optics-all derivations to be done in homework.

Biology

1. Completion of record
2. Investigatory project