

## WORKSHEET 3 PYTHON

**Q1 to Q8 have only one correct answer. Choose the correct option to answer your question.**

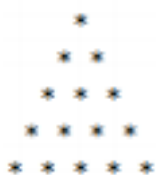
- Which of the following will raise a value error in python?  
A) int(32)  
B) int(3.2)  
C) int(-3.2)  
D) int('32')
- What will be the output of round(3.567)?  
A) 3.5  
B) 3.0  
C) 4  
D) 3
- How is the function pow(a,b,c) evaluated in python?  
A) a\*\*b\*\*c  
B) (a\*\*b)%c  
C) (a\*\*b)\*c  
D) (a\*\*b)\*\*c
- What will be the output of **print(type(type(int)))** in python 3?  
A) <class 'type'>  
B) <type 'type'>  
C) <class 'int'>  
D) <type 'int'>
- What will be the output of **ord(chr(65))**?  
A) 'A'  
B) 'a'  
C) 65  
D) TypeError
- What is called when a function is defined inside a class?  
A) Module  
B) Function  
C) \_init\_ function  
D) Method
- What will be the output of **all([1, 0, 5, 7])**?  
A) 0  
B) False  
C) True  
D) error
- Is the output of the function abs() the same as that of the function math.fabs()?  
A) Always  
B) Sometimes  
C) Never  
D) None of these

**Q9 and Q10 have multiple correct answers. Choose all the correct options to answer your question.**

9. Select all correct float numbers in python?
- A) -68.7e100                      B) 42e3  
C) 4.2038                          D) 3.0
10. Which of the following is(are) correct statement(s) in python?
- A) You can pass positional arguments in any order.  
B) You can pass keyword arguments in any order.  
C) You can call a function with positional and keyword arguments.  
D) Positional arguments must be before keyword arguments in a function call

**Q11 to Q15 are programming questions. Answer them in Jupyter Notebook.**

11. Write a python function print pyramid of stars. Level of the pyramid should be taken as an input from the user. E.g.  
Input = 5  
Output:



12. Write a python function print Hourglass pattern.

E.g.

Input = 5

Output:

```
* * * * *
 * * * * 
  * * *  
   * *   
    *    
   * *   
  * * *  
 * * * * 
* * * * *
```

13. Write a python function to print Pascal's Triangle. The number of levels in the triangle must be taken as input by the user. E.g.

Input = 5

Output:

```
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1
```

14. Write a python function to print Diamond Shaped Pattern shown below. Function must take integer input which represents the number of stars in the middle most line. E.g.:

Input = 5

Output:

```
  *
 * *
* * *
* * * *
* * * * *
* * * * 
 * * *
  * *
   *
```

FLIP ROBO

15. Write a python function to print Diamond Shaped Character Pattern shown below. Function must take integer input within range 1 to 26, which represents the rank of the alphabet. E.g.:

Input = 5

Output:

```
  A
 A B
A B C
A B C D
A B C D E
 A B C D
  A B C
   A B
    A
```