

1. Which of the following will raise a value error in python?

Ans – D

2. What will be the output of round (3.567)?

Ans – C

3. How is the function pow (a, b, c) evaluated in python?

Ans – B

4. What will be the output of print(type(type(int))) in python 3?

Ans – A

5. What will be the output of Ord (chr (65))?

Ans – C

6. What is called when a function is defined inside a class?

Ans – D

7. What will be the output of all ([1, 0, 5 ,7])?

Ans – B

8. Is the output of the function abs () the same as that of the function math. Fabs ()?

Ans – B

9. Select all correct float numbers in python?

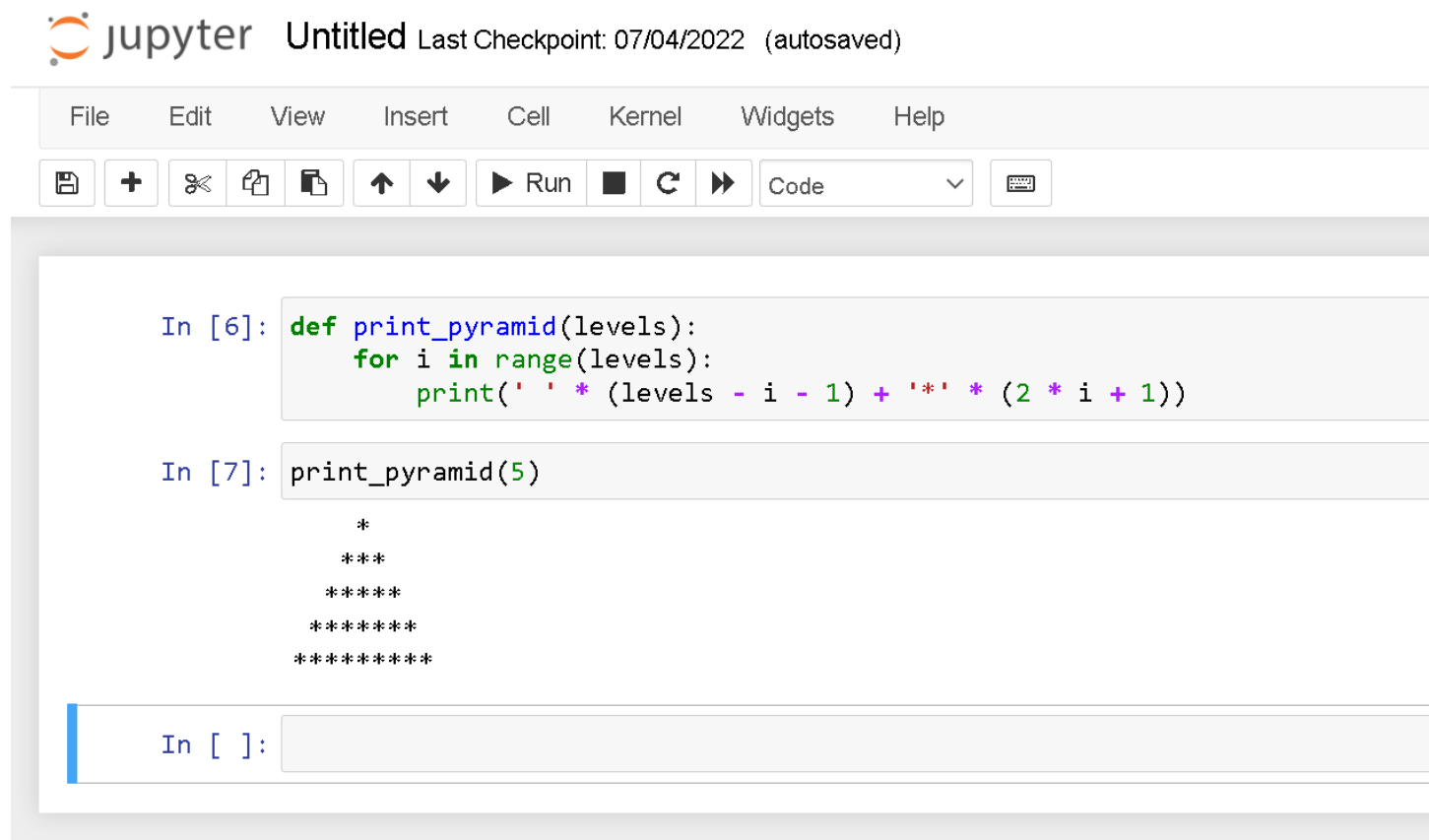
Ans – A, B, C and D

10. Which of the following is(are) correct statement(s) in python?

Ans - Option A and B are partially correct, and option C and D are both correct.

11. Write a python function print pyramid of stars. Level of the pyramid should be taken as an input from the user.

Ans -



The image shows a Jupyter Notebook interface with the title "Untitled" and a last checkpoint of "07/04/2022 (autosaved)". The interface includes a menu bar with "File", "Edit", "View", "Insert", "Cell", "Kernel", "Widgets", and "Help". Below the menu bar is a toolbar with icons for saving, adding, deleting, copying, pasting, undo, redo, running, and a dropdown menu currently set to "Code". The notebook contains two code cells. The first cell, labeled "In [6]:", defines a function `print_pyramid(levels):` that uses a `for` loop to print a pyramid of stars. The second cell, labeled "In [7]:", calls the function `print_pyramid(5)`, which outputs a pyramid of 5 levels of stars. The output is as follows:

```
In [6]: def print_pyramid(levels):
        for i in range(levels):
            print(' ' * (levels - i - 1) + '*' * (2 * i + 1))


In [7]: print_pyramid(5)

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





The third cell, labeled "In [ ]:", is currently empty.

12. Write a python function print Hourglass pattern?

Ans -

 jupyter Untitled Last Checkpoint: 07/04/2022 (autosaved)

File Edit View Insert Cell Kernel Widgets Help

        Run    Code  

```
In [8]: def print_hounglass(size):  
        for i in range(size, 0, -1):  
            print(' ' * (size - i) + '*' * (2 * i - 1))  
        for i in range(2, size + 1):  
            print(' ' * (size - i) + '*' * (2 * i - 1))
```

```
In [9]: print_hounglass(5)
```

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

```
In [ ]:
```

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.

Ans -

 jupyter Untitled Last Checkpoint: 07/04/2022 (unsaved changes)

File Edit View Insert Cell Kernel Widgets Help

        Run    Code 

```
In [10]: def print_pascal_triangle(levels):  
         triangle = []  
         for i in range(levels):  
             row = [1] * (i + 1)  
             for j in range(1, i):  
                 row[j] = triangle[i - 1][j - 1] + triangle[i - 1][j]  
             triangle.append(row)  
         for row in triangle:  
             print(' '.join(str(num) for num in row).center(levels * 2))
```

```
In [11]: print_pascal_triangle(5)
```

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


```
In [ ]: |
```

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.

Ans -

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File Edit View Insert Cell Kernel Widgets Help

        Run    Code 

```
In [12]: def print_diamond_pattern(num_stars):  
          # print upper triangle  
          for i in range(1, num_stars + 1):  
              print(' ' * (num_stars - i) + '*' * (2 * i - 1))  
          # print lower triangle  
          for i in range(num_stars - 1, 0, -1):  
              print(' ' * (num_stars - i) + '*' * (2 * i - 1))
```

```
In [13]: print_diamond_pattern(5)
```

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














```
In [ ]: |
```

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.

Ans -

 jupyter Untitled Last Checkpoint: 07/04/2022 (unsaved changes)

File Edit View Insert Cell Kernel Widgets Help

        Run    Code  

```
In [14]: def print_diamond_char_pattern(rank):  
    mid_char = chr(ord('A') + rank - 1)  
  
    for i in range(1, rank + 1):  
        line = ' ' * (rank - i)  
        for j in range(i):  
            line += chr(ord('A') + j) + ' '  
        print(line)  
  
    for i in range(rank - 1, 0, -1):  
        line = ' ' * (rank - i)  
        for j in range(i):  
            line += chr(ord('A') + j) + ' '  
        print(line)
```

```
In [22]: print_diamond_char_pattern(5)
```

```
  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
```