1: Define a function that accepts roll number and returns whether the student is present or absent.

2: Define a function which counts vowels and consonant in a word.

3: Define a function that returns Factorial of a number.

4: Define a function that accepts lowercase words and returns uppercase words.

5: What is the difference between local and global variable?

6: What is the scope of a variable (in function)?

7: What is the difference between a parameter and an argument?

8: Name three iterable object in Python?

9: What does function returns by default in Python?

10: Write a shutting down program:

First, def a function, `shut_down`, that takes one argument `s`. Then, if the `shut_down` function receives an `s` equal to "yes", it should return "Shutting down" Alternatively, elif `s` is equal to "no", then the function should return "Shutdown aborted". Finally, if `shut_down` gets anything other than those inputs, the function should return "Sorry".

11: Import the `math` module in whatever way you prefer. Call its `sqrt` function on the number 13689 and print that value to the console.

12: First, def a function called `distance_from_zero`, with one argument (choose any argument name you like). If the type of the argument is either `int` or `float`, the function should return the absolute value of the function input. Otherwise, the function should return "Nope". Check if it works calling the function with -5.6 and "what?".

13: Rewrite your pay computation program (previus chapter) with time-and-a-half for overtime and create a function called `computepay` which takes two parameters (hours and rate).

```
Enter Hours: 45
Enter Rate: 10
Pay: 475.0
```

14: Follow the stpes:

- First, def a function called `cube` that takes an argument called `number`.
- Make that function return the cube of that number (i.e. that number multiplied by itself and multiplied by itself once again).

- Define a second function called `by_three` that takes an argument called number. if that number is divisible by 3,`by_three`should call `cube(number)` and return its result. Otherwise, `by_three` should return False. - Check if it works.

15: Write a Python program to reverse a string.

Sample String: "1234abcd"
Expected Output: "dcba4321"

16: Write a Python function that accepts a string and calculate the number of upper case letters and lower case letters.
Sample String : 'The quick Brow Fox'
Expected Output :
No. of Upper case characters : 3
No. of Lower case Characters : 12

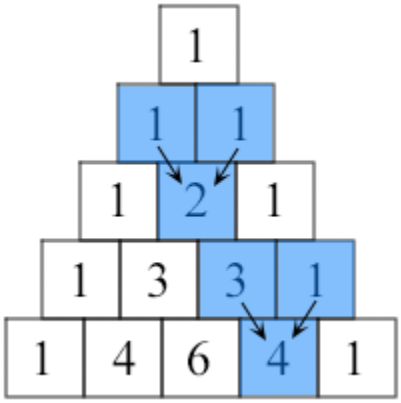
17: Write a Python function that takes a list and returns a new list with unique elements of the first list.
Sample List : [1,2,3,3,3,3,4,5]
Unique List : [1, 2, 3, 4, 5]

18: Write a Python function to check whether a number is perfect or not.

According to Wikipedia : In number theory, a perfect number is a positive integer that is equal to the sum of its proper positive divisors, that is, the sum of its positive divisors excluding the number itself (also known as its aliquot sum). Equivalently, a perfect number is a number that is half the sum of all of its positive divisors (including itself).
Example : The first perfect number is 6, because 1, 2, and 3 are its proper positive divisors, and 1 + 2 + 3 = 6. Equivalently, the number 6 is equal to half the sum of all its positive divisors: (1 + 2 + 3 + 6) / 2 = 6. The next perfect number is 28 = 1 + 2 + 4 + 7 + 14. This is followed by the perfect numbers 496 and 8128.

19: Write a Python function that prints out the first n rows of Pascal's triangle.
Note : Pascal's triangle is an arithmetic and geometric figure first imagined by Blaise Pascal.

Sample Pascal's triangle :



Each number is the two numbers above it added together

20: Write a Python program that invoke a given function after specific milliseconds.
Sample Output:
Square root after specific miliseconds:
4.0
10.0
158.42979517754858