

## PYTHON: Assignment 1.

Instructions:

1. Solve All Problems using function.
2. Submit your solutions to our class' email address before 12 today.

**1. Take a List of String as input from user and Print Vowels and Consonants in Each String separately.**

**Input:** shashi ,ashish, kanha ,rahul

**Output:** In string Shashi , Vowels: a,i consonants: shsh

In string Ashish, Vowels: a,, i consonants: shsh

In string Kanha , Vowels: a,a consonants : knh

In string Rahul , Vowels: a,u consonants :r, h, l

**2. Write a Program to take input in Set , if Set has even number of elements, print set is even ,else print middle element of set**

**Input:**

Set1 = {"apple" , "banana" , "Cherry"},

**Output:**

"Middle Element is "banana"

**Input:**

Set1 = {"apple" , "banana" , "Cherry","chocolate"}

**Output:**

Set is Even

**3. Write a Program to take Dictionary as input from user, if one's key is value of other pair, remove entry of that key from dictionary.**

**Input:**

**Dictionary: {"brand" : apple, "1": rahul, "samsung":brand}**

**Output: {"1":rahul, "samsung":brand}**

**4.. Write a Program to accept integer as input in tuple, print addition of all elements.**

**Input:**

**my\_tuple = (4, 2, 3, 8,10)**

**Output: 27**

**5. Write a Program to accept string array from user, if reverse of string appears in array, Print Occurrence Count.(use numpy array)**

**Input:**

**cars = ["Ford", "Volvo", "BMW", "jaguar", "dorf", "audi", "dorf"]**

**OutPut:**

**Reverse string of ford appeared 2 times.**

**6. Write a Program to take two integer arrays from user, add both array and Store the addition in 3rd array then print 3rd Array.( use numpy array)**

**Input:**

**Arr1 = [1, 2, 3, 4, 5]**

**Arr2 = [5, 6, 7, 8, 9]**

**Output:**

**Arr3 = [6, 8, 10, 12, 14]**

**7. Write a Program to take integer Array from User, then Check if number is armstrong or strong number, print accordingly.(use numpy array)**

**Input:**

**Arr1 = [5, 145, 57, 153]**

**Output:**

**153 is armstrong number**

**8. Write a program that Accepts Integer Array from User, and Print Occurrence Count of 1 .(use numpy array)**

**Input:**

**Arr1 = [1 ,2 ,3, 11, 71, 19, 16]**

**Output: 1 Appeared 6 times**

**9. Write a Program to take two integer arrays of same length from user , multiply both array and Store the multiplication in 3rd array then print 3rd Array.(use numpy array)**

**Input:**

**Arr1 = [1 , 2 ,3 ,4,5]**

**Arr2 = [2 ,4, 5, 9, 3]**

**Output:**

**Arr3 = [2, 8 , 15, 36, 15]**

**10. Write a Program To Accept 2 built-in integer arrays from user ,Then Calculate Average of 1'st Array and Check if it's available in 2nd array.**

**Input:**

**Arr1 = [3, 7, 9, 3, 8]**

**Arr2 = [11, 6 , 9 , 23]**

**Output:**

**Average of Array1 6 is available in Array2**

**11. Write a Program To Accept 2 built in integer arrays from user ,then print index of element in second array if its cube of element in first array.**

**Input:**

**arr1 = [1 2 3 4]**

**arr2=[ 2 5 8 64]**

**Output:**

**Index of 8 which is cube of 2 is 2**

**Index of 64 which is cube of 4 is 3**

**12. Write a Program To Take range as input from user, Print Occurrence count of 1 in that range.**

**Input: 20**

**Output:11**

**13. Write a Program to Print Following Program.**

			=
		=	A
	=	B	A
=	C	B	A

14. Write a Program to Print Following Program.

```

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

15. Write a Program to Print Following Program.

```

100
81  64
49  36  25
16  9   4   1
  
```

16. Write a Program to Print Following Program.

```

1   2   3   4   5   6   7
   2   3   4   5   6
    3   4   5
     4
  
```

17. Write a Program to Print Following Program.

```

      A
    A  B  C
  A  B  C  D  E
A  B  C  D  E  F  G
  
```

18. Write a Program to Print Following Program.

```
1
1  2
3  5  8
13 21 34 55
```

19. Write a Program to print Following Program

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

20. Write a Program to Print Following Program.

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