Assignment 2

Referral id: SIRSS1088
NAME: ONASVEE BANARSE
EMAIL : 2obanarse@gmail.com
COLLEGE: AISSMS IOIT
github : https://github.com/ORION-22/RegexSoftware_ASSIGNMENT.git

Q1. Write a lambda expression to extract first word of a string

In [4]:

```
c = "hello world this is orion "
a = (lambda x:[i for i in x if i[0].isalpha()][0])(c.split())
print(a)
```

```
hello
```

Q2. Write a function to extract first word of s string (with many words separated by space).

In [21]:

```
def firstLetterWord(str):
    result =[]
    v = True
    for i in range(len(str)):
        if (str[i] == ' '):
            v = True
        elif (str[i] != ' ' and v == True):
            result.append(str[i])
            v = False
    return result

str = "hello Regex Software thank you for support."
print('The string is :',str)
print('List of first alphabet of the words:',firstLetterWord(str))
```

```
The string is : hello Regex Software thank you for support.
List of first alphabet of the words: ['h', 'R', 'S', 't', 'y', 'f', 's']
```

Q3. Extract the first word from every string from a list of strings by using map function.

In [16]:

```
list1=["hello world","regex software","thank you"]
list2=[]

for i in list1:
    first_word=i.split()[0]
    list2.append(first_word)

print("First words of the list of sentences are:")
print(list2)
```

```
First words of the list of sentences are:
['hello', 'regex', 'thank']
```

Q4. Write a function to return a list of prime factors of a given number.

In [9]:

```
Number = int(input("Please Enter any Number: "))
```

```
lsprime=[]
for i in range(2, Number + 1):
    if(Number % i == 0):
        isprime = 1
        for j in range(2, (i //2 + 1)):
            if(i % j == 0):
                isprime = 0
                break

        if (isprime == 1):
            lsprime.append(i)

print('List of prime factors:')
print(lsprime)
```

```
Please Enter any Number: 1000
List of prime factors:
[2, 5]
```

Q5. Write a function that finds 2nd largest among 4 numbers (Repetitions are allowed, without sorting).

In [12]:

```
list1 = []

num = int(input("Enter number of elements in list: "))
for i in range(1, num + 1):
    ele = int(input("Enter elements: "))
    list1.append(ele)

new_list = set(list1)
new_list.remove(max(new_list))
print("Second largest",max(new_list))
```

```
Enter number of elements in list: 4
Enter elements: 1
Enter elements: 2
Enter elements: 3
Enter elements: 4
Second largest 3
```

In [ ]: