# TASK 2

# Divyansh Singh Sengar

# Assignment 2

## 1

In [6]:
```
get_first_word = lambda string : string.split()[0]
print(get_first_word("Divyansh Singh Sengar"))
```

```
Divyansh
```

## 2

In [9]:
```
def getFirstWord(string):
    return string.split()[0]
print(getFirstWord("Regex Software Services"))
```

```
Regex
```

## 3

In [15]:
```
arr=['Divyansh Sengar','Regex Software Services','Indian Ocean','
def getFirstWord(string):
    return string.split()[0]
result=map(getFirstWord,arr)
print(list(result))
```

```
['Divyansh', 'Regex', 'Indian', 'Data']
```

## 4

In [20]:
```
import math
def primeFactors(n):
    arr=[]
    while n % 2 == 0:
        arr.append(2)
        n = n // 2
    for i in range(3, int(math.sqrt(n))+1, 2):
        while n % i == 0:
            arr.append(i)
            n = n // i
    if n > 2:
        arr.append(n)
    return arr

print(primeFactors(186))
```

```
[2, 3, 31]
```

# 5

In [10]:
```
def sec_largest(arr):
    max_num=arr[0]
    min_diff=0
    for i in range(len(arr)):
        if arr[i]>max_num:
            max_num=arr[i]
    for i in range(len(arr)):
        if i==0:
            diff=max_num-arr[i]
            min_diff=diff
        else:
            diff=max_num-arr[i]
            if diff<min_diff and diff!=0:
                min_diff=diff
                result=arr[i]
    return result
arr=[10,40,12,23]
print(sec_largest(arr))
```

```
23
```