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Assignment 2

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

In [3]:

```
func1 = lambda x:x.split()[0]

func1('First word of this sentence')
```

Out[3]:

```
'First'
```

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

In [9]:

```
def func2(x):
    return x.split()[0]

func2('First word of this sentence')
```

Out[9]:

```
'First'
```

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

In [10]:

```
strings = ['Lorem Ipsum is simply dummy text of', 'the printing and typesetting industry.',
lst = map(lambda x:x.split()[0],strings)
for i in lst:
    print(i)
```

```
Lorem
the
Lorem
standard
```

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

In [19]:

```
def prime_factors(x):
    factors=[]
    i=2
    while x>1:
        if x%i==0:
            factors.append(i)
            x=x//i
        else:
            i+=1
    return factors

prime_factors(2806)
```

Out[19]:

```
[2, 23, 61]
```

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

In [36]:

```
def second_largest(a,b,c,d):
    lar1=0
    lar2=0
    a=[a,b,c,d]
    if a[0]>a[1]:
        lar1=a[0]
        lar2=a[1]
    else:
        lar1=a[1]
        lar2=a[0]
    for i in range(2,4):
        if a[i]>lar1:
            lar2=lar1
            lar1=a[i]
        elif a[i]<lar1 and a[i]>lar2:
            lar2=a[i]
    return lar2

second_largest(6,2,5,5)
```

Out[36]:

```
5
```