Question 1

In [13]:
```
# lambda expression to extract first word of a string.

x = lambda a : a.split()[0][0]

x('She is very good')
```

Out[13]: 'S'

Question 2

In [14]:
```
# lambda expression to extract first word of a string.

x = lambda a : a.split()[0]

x('She is very good')
```

Out[14]: 'She'

Question 3

In [18]:
```
#Getting first word of all the strings using map function.

lst = ['She is very good','He is very Bad','True that']

list(map(x, lst))
```

Out[18]: ['She', 'He', 'True']

Question 4

In [79]:
```
import math

def check_prime(x):
    """Function accept a number and check if the number is prime or not"""

    for i in range(2,x):
        if x % i == 0:
            flag = False
            break
        else:
            flag = True

    return flag

#function to return a list of prime factors of given number!
def prime_factor(x):
    """Function accepts a number and returns list of prime factors for it"""
    factors = []
    check = check_prime(x)
    if not(check):
        i = 2
        while i <= x:
            if(x % i == 0):
                factors.append(i)
                x = math.floor(x // i)
            else:
                i += 1

    else:
        factors.append('This is prime number')

    return factors

prime_factor(120)
```

Out[79]: [2, 2, 2, 3, 5]

Question 5

In [105…
```
#function to find 2nd largest among 4 numbers (Repetitions are allowed,without sorting).

lst = [23,2,23,2]
def remove_element(lst,element):
    lst.remove(element)
    return lst

def second_largest(lst):
    """Function take list of the numeber and finds 2nd largest among them"""

    for j in range(3):
        lar = lst[0]
        for i in range(len(lst)):
            if lst[i] > lar:
                lar = lst[i]

        if j != 2:
            lst = remove_element(lst,lar)
#         print(lst)

    return lar

second_largest(lst)
```

Out[105… 2