

Reference/Referral/Registration I'd: SIRSS1218

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Subject: assignment-2 on python

Explanation: Solve the given questions using lambda and Function Concepts in python

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

In [1]:

```
s="My name is shuchi"  
a=lambda a:a.split()[0]  
list(map(a,s))
```

Out[1]:

```
['My']
```

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

In [2]:

```
def first_word(s):  
    return s.split()[0]  
s=input("enter a string: ")  
first_word(s)
```

enter a string: my name is shuchi

Out[2]:

```
'my'
```

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

In [3]:

```
los=["python code is","is clear","clear and","easy to understand"]  
n=lambda n:n.split()[0]  
list(map(n,los))
```

Out[3]:

```
['python', 'is', 'clear', 'easy']
```

Q 4. Write a function to return a list of prime factors of a given number

In [4]:

```
def primefact(n):
    for i in range(2,int(n**(0.5))+1):
        if n%i==0:
            return 0
    else:
        return 1
n=int(input("enter a number: "))
list=[1]
for i in range (2,n+1):
    if n%i==0:
        if(primefact(i)) ==1:
            list.append(i)
print(list)
```

enter a number: 8

[1, 2]

Q.5) Write a function that finds second largest among 4 numbers(repetitions are allowed, without sorting)

In [5]:

```
NumList = []
list=int(input("enter the number of list of elements : "))
for i in range(1, list + 1):
    value = int(input("Please enter the Value of %d Element : " %i))
    NumList.append(value)

first = second = NumList[0]
for j in range(1, list):
    if(NumList[j] > first):
        second = first
        first = NumList[j]
    elif(NumList[j] > second and NumList[j] < first):
        second = NumList[j]

print("The Second Largest number Element in this List is : ", second)
```

enter the number of list of elements : 4

Please enter the Value of 1 Element : 6

Please enter the Value of 2 Element : 8

Please enter the Value of 3 Element : 9

Please enter the Value of 4 Element : 6

The Second Largest number Element in this List is : 8