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DEP.NO : 12

COURSE : PYTHON

ASSIGNMENT :LAB-5

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1. create a function prime () that receive an integer and returns whether n is prime or not print all prim numbers from 1 to 100 by calling prime() function

```
prime_numbers = 0

def is_prime_number(x):
   if x >= 2:
      for y in range(2,x):
         if not ( x % y ):
            return False
   else:
      return False
   return True

for i in range(int(input("How many numbers you wish to check: "))):
   if is_prime_number(i):
      prime_numbers += 1
      print(i)

print("We found " + str(prime_numbers) + " prime numbers.")
```

Output:

```
How many numbers you wish to check: 100
2
3
5
7
11
13
17
19
23
29
31
37
```

```
41
43
47
53
59
61
67
71
73
79
83
89
97
We found 25 prime numbers
```

2. develop a simple arithmetic calculator for 4 operations.the program should continue calculation until use types 'q' to quit . a sample user interaction can be:

Source code:

```
def add(x,y):
   return x+y
def substract(x,y):
    return  x-y
def multiply(x,y):
    return  x*y
def divide(x,y):
    return  x/y
print("select the operator")
print("1.add")
print('2.substract')
print("3.multiply")
print('4.divide')
choice = input("enter the choice(1/2/3/4):")
num1 = int(input("enter the first number: "))
num2 = int(input("enter the second number: "))
if choice =='1':
    print(num1,"+",num2,"=",add(num1,num2))
elif choice =="2":
     print(num1,"-",num2,"=",substr(num1,num2))
elif choice =='3':
    print(num1,"*",num2,"=",multiply(num1,num2))
elif choice =="3":
```

```
   print(num1,"/",num2,"=",divide(num,num2))
else:
      print("invalid input")
```

Output:

```
select the operator
1.add
2.substract
3.multiply
4.divide
enter the choice(1/2/3/4):1
enter the first number: 66
enter the second number: 40
66 + 40 = 106
```
