Exercise on Functions

Mark Lopes

9913

S.E Comps_A Batch_C

1. Write a function called showNumbers that takes a parameter called limit. It should print all the numbers between 0 and limit with a label to identify the even and odd numbers. For example, if the limit is 3, it should print:

   0 EVEN

   1 ODD

   2 EVEN

   3 ODD

```python
def showNumbers(linit):
    for i in range(0,linit):
        if i%2==0:
            print(f"{i} EVEN")
        else:
            print(f"{i} ODD")


limit = int(input("Enter the limit: "))
showNumbers(limit)
```

```
"C:\Users\Mark Lopes\PycharmP
Enter the limit: 10
0 EVEN
1 ODD
2 EVEN
3 ODD
4 EVEN
5 ODD
6 EVEN
7 ODD
8 EVEN
9 ODD
```

2. Write a function that returns the sum of multiples of 3 and 5 between 0 and limit (parameter). For example, if limit is 20, it should return the sum of 3, 5, 6, 9, 10, 12, 15, 18, 20.

```python
def return_multiple_3_5(limit):
    for i in range(1,limit+1):
        if i%3==0 or i%5==0:
            print(f"{i} ")



limit = int(input("Enter the limit: "))
return_multiple_3_5(limit)
```

```
"C:\Users\Mark Lopes\Pycl
Enter the limit: 20
3
5
6
9
10
12
15
18
20
```

3. Write a function called show_stars(rows). If rows is 5, it should print the following:

```
*
**
***
****
*****
```

```python
def show_stars(rows):
    for i in range(1,rows+1):
        for j in range(1,i+1):
            print('*',end = '')
        print()




rows = int(input("Enter the no. of rows: "))
show_stars(rows)
```

```
"C:\Users\Mark Lopes\PycharmProjects
Enter the no. of rows: 5
*
**
***
****
*****

Process finished with exit code 0
```

4. Write a function that prints all the prime numbers between 0 and limit where limit is a parameter.

```python
def prime(limit):

    for i in range(1,limit+1):
        count = 0
        for j in range(1,i+1):
            if i%j==0:
                count+=1
        if count==2:
            print(i)



limit = int(input("Enter the limit: "))
prime(limit)
```

```
"C:\Users\Mark Lopes\PycharmProjects\
Enter the limit: 13
2
3
5
7
11
13

Process finished with exit code 0
```