Ramila Jane B. Abobo Group Exercise

CS3C

1. Display numbers from -10 to -1 using for loop

```
9
10  #Display numbers from -10 to -1 using for loop
11  for num in range(-10, 0):
12      print(num)
13      print("")
14
```

```
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
```

2. Use else block to display a message “Done” after successful execution of for loop

```
15  #Use else block to display a message "Done" after successful execution of for loop
16  for num in range(-10, 0):
17      print(num)
18  else:
19      print("Done")
20      print("")
21
```

```
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
Done
```

3. Write a program to display all prime numbers within a range

```
22  #Write a program to display all prime numbers within a range
23  start = int(input("Enter the starting number: "))
24  end = int(input("Enter the ending number: "))
25
26  print(f"Prime numbers between {start} and {end}:")
27  for num in range(start, end + 1):
28      if num > 1:
29          is_prime = True
30          for i in range(2, int(num**0.5) + 1):
31              if num % i == 0:
32                  is_prime = False
33                  break
34          if is_prime:
35              print(num, end=" ")
36              print("")
37
```

```
Enter the starting number: 10
Enter the ending number: 20
Prime numbers between 10 and 20:
11
13
17
19
```

4. Use a loop to display elements from a given list present at odd index positions

```python
#Use a loop to display elements from a given list present at odd index positions
given_list = [10, 20, 30, 40, 50, 60, 70, 80, 90]

print("Elements at odd index positions:")
for i in range(1, len(given_list), 2):
    print(given_list[i])
    print("")
```

```
Elements at odd index positions:
20

40

60

80
```

5. Display numbers from a list using loop
   a. The number must be divisible by five
   b. If the number is greater than 150, then skip it and move to the next number
   c. If the number is greater than 500, then stop the l
   numbers = [12, 75, 150, 180, 145, 525, 50]

```python
#Display numbers from a list using loop
numbers = [12, 75, 150, 180, 145, 525, 50]

print("Numbers divisible by five:")
for num in numbers:
    if num % 5 == 0:
        if num > 500:
            print("Number greater than 500 encountered. Stopping loop.")
            break
        elif num > 150:
            print("Number greater than 150 encountered. Skipping.")
            continue
        else:
            print(num)
```

```
Numbers divisible by five:
75
150
Number greater than 150 encountered. Skipping.
145
Number greater than 500 encountered. Stopping loop.
```