Python Programming

Loops Practice Programs

1. Create a Python program named loop1.py that does the following:

   a. Ask the user to enter a number 100 or higher.
   b. If the number is not 100 or higher, a loop will keep asking the user to enter a number until one 100 or higher is entered.
   c. Next, another loop will run that outputs all numbers from 100 to the number the user entered.

   Sample run:

   Please enter even number 100 or greater: 110
   100
   101
   102
   103
   104
   105
   106
   107
   108
   109

2. Create a loop that produces the following output. Your program should have one two lines of code.

   Sample run:

   100
   200
   300
   400
   500
   600
   700
   800
   900
   1000

3. Create a program that does the following:

    a. Asks the user for maximum value.
    b. Asks the user to enter a value that numbers should be divisible.
    c. Loops from 1 to the maximum value and outputs just those numbers that are divisible by the user entered by the user.

Sample run:

    Enter a maximum value: 20
    Enter value numbers should be divisible by: 3
    3 is divisible by 3
    6 is divisible by 3
    9 is divisible by 3
    12 is divisible by 3
    15 is divisible by 3
    18 is divisible by 3

4. Create a Python program with the following two lines in the main part of the program.

```
choice = menu()
print("You chose menu option", choice)
```

Create the rest of the program, which will be a user-defined function names menu(). This function will present the user with the following menu, require a valid user input (1-3), loop and ask for user input again if invalid user input is entered, and then produce the output shown below once the correct user input is supplied. This can be done with a while loop and does not require a try… catch.

Sample run:

MAIN MENU
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1. Print pay check
2. Change benefits
3. Exit
Chose menu option (1-3): 5
Invalid choice. Please enter 1-3: dd
Invalid choice. Please enter 1-3: 1
You chose menu option 1