Assignment (BCAC493)
(User defined function, Global variable Concept, lambda function)

1. Write a program to check weather a given number is ugly number or not by using check_ugly() and return 1 if condition satisfied otherwise return 0.

   [In number system ugly number are positive number whose only prime factor are 2, 3 or 5]

2. Write a program to find the greatest of three given number using function. Pass the numbers as arguments.
   Use check_input() function to accept input from user and check the user given input is greater than 0 or not, if any of three values is not greater than 0 then asking for given a valid number.
   And use greatest_check(num1,num2,num3) to check greatest among three positive numbers.
   [Hints: Use global variable concept]

3. Write a program to check a given number is prime or not. Define three functions

   take_input() - take input from user and also check input is valid or not, if valid return input value otherwise asking for correct value.

   validate_input(arg1) – in take_input() function for validation of input , we can use this validate_input() function.

   check_prime(arg1) – to check a given number is prime or not, if number is prime print Prime otherwise Not Prime.

   Call validate_input() function in take_input() function for validate user given input after taking input from user.
   Finally call take_input() and check_prime() functions.

   Sample Output:

   Enter a number -1
   Please enter a positive or Non Zero value!!!
   Enter a number 0
   Please enter a positive or Non Zero value!!!
   Enter a number 13
   Prime 13

4. Write e function that accepts an integer between 1 to 12 to represent the months number and display the corresponding month of the year(For example if month = 1 the display JANUARY)

5. Write a menu driven program to calculate addition, subtraction, multiplication, division of two numbers by using take_input(), menu(), operation() function and also use **lambda function** to perform addition, subtraction, division, and multiplication**.**

take_input() – to take input from user and store it to global variable.
menu() – to display the menu option.
operation(num1, num2) – accept two arguments, and to perform the addition, subtraction, division, multiplication. If you enter any wrong choice it will ask you for enter correct option.

Finally call take_input() , and operation() function and call menu() function in operation() function.

Sample Output:

Enter the value of a:10
Enter the value of b:5
.........MENU.............
1.Press 1 for addition
2.Press 2 for subtraction
3.Press 3 for multiplication
4.Press 4 for division
....
Enter your choice...5
Please enter a correct option....
.........MENU.............
1.Press 1 for addition
2.Press 2 for subtraction
3.Press 3 for multiplication
4.Press 4 for division
....
Enter your choice...4
Division Result : 2

6. Write a function that accept two positive number n and m where m<=n, and return numbers between 1 and n that are divisible by m.

Sample Output:

Enter a number20
Enter a number60
Sorry!!!Condition m<=n is violate

Enter a number-1
Enter a number20
Please Enter a Correct Input....

Enter a number10
Enter a number2
2 4 6 8 10