

**The Islamic University of
Gaza**

**Faculty of Information
Technology**

**Department of Computer
Science**



**Fall Semester 2025–2026
Multimedia Programming I
Instructor: Aya N.
Alharazin**

Loops

1- Write a Python Function that take an integer number and then calculates and return the sum of its digits.

2- Write a Python function that takes an integer number as a parameter and returns the number of digits in that number.

3- Write a Python function named reverse_number that takes an integer number as a parameter and returns the reversed number.

4- Write a Python function named is_palindrome that takes an integer number as a parameter and returns True if the number is a palindrome, otherwise returns False.

5- Write a Python function named is_prime that takes an integer number as a parameter and checks whether the number is a prime number or not.

6- Write a Python function named get_factors that takes an integer number as a parameter and returns all the factors of that number.

7- Write a Python program that prints the following patterns.

a.

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

b.

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

8- Write a Python program that keeps asking the user to enter integers , The program should add all positive numbers entered by the user , If the user enters a negative number, the program should stop immediately and print the total sum.

9- Write a Python program that prints numbers from 1 to 20, but , Skip any number that is divisible by 3 .

10- Write a Python program that asks the user to enter numbers one by one , Ignore odd numbers , As soon as the user enters an even number greater than 10, print it and stop the program.

11- Ask the user to enter 10 numbers one by one. Find and display the maximum number.