**Experiment: 2**

**PART A**

**(PART A: TO BE REFERRED BY STUDENTS)**

**Aim: To study Selection statements (if, if-else, else-if ladder, nested if-else) Iterations (for, while, do-while), Jump statements (goto)**

|  |  |
| --- | --- |
| **Programs** | **Experiment** |
| 1. | WAP to accept 3 nos. From command line arguments and print maximum, minimum and total of all three nos. |
| 2. | Write a Java program that calculates the sum of digits of a given integer. |
| 3. | Write a Java program that prints the Fibonacci sequence up to the nth term, where n is provided as input. |
| 4. | Write a Java program that checks whether a given number is a palindrome or not. |
| 5. | Write a Java program that checks whether a given number is prime or not. |
| 6. | Write a Java program that checks whether a given number is an Armstrong number. An Armstrong number is a number that is equal to the sum of its own digits raised to the power of the number of digits. |
| 7. | Write a Java program that reverses a given number. |
| 8. | Write a Java program that accepts a range of numbers between n1 till n2 and prints all the prime numbers in between this range. |
| 9. | Generate the following pattern:  \*  \*\*\*  \*\*\*\*\*  \*\*\*\*\*\*\*  \*\*\*\*\*\*\*\*\* |
| 10. | Generate the following pattern:  1  1 2 1  1 2 3 2 1  1 2 3 4 3 2 1  1 2 3 4 5 4 3 2 1 |

**PART B**

**(PART B: TO BE COMPLETED BY STUDENTS)**

Students must submit the soft copy as per following segments within two hours of the practical. The soft copy must be uploaded on the portal at the end of the practical. The filename should be **JAVA\_batch\_rollno\_experimentno Example: JAVA\_A1\_A001\_P1**

|  |  |
| --- | --- |
| **Roll No.:** | **Name:** |
| **Prog/Yr/Sem:** | **Batch:** |
| **Date of Experiment:** | **Date of Submission:** |

**Program 1.**

a. Input statement

b. Code

c. Output statement

**Conclusion (Learning Outcomes):** Reflect on the questions answered by you jot down your learnings about the Topic: