

## **Assignment – 2 (IF-ELSE)**

- 1) Write a program that checks if a number is positive, negative, or zero.
- 2) Write a program that checks if a number is odd or even.
- 3) Write a program that checks if a string is a palindrome.
- 4) Write a program that checks if a year is a leap year.
- 5) Write a program that calculates the maximum of three numbers.
- 6) Write a program that checks if a number is prime.
- 7) Write a program that converts a letter grade to a numerical grade.
- 8) Write a program that checks if a given password is strong.
- 9) Write a program that calculates the area of a triangle given its base and height.
- 10) Write a program that determines if a given year is a leap year according to the Gregorian calendar.
- 11) Write a program that checks if a given string is a valid email address.
- 12) Write a program that checks if a given number is a perfect square.
- 13) Write a program that calculates the factorial of a given number.
- 14) Write a program that checks if a given number is a multiple of 7.
- 15) Write a program that checks if a given string is a valid URL.
- 16) Write a program that checks if a given number is a power of 2.
- 17) Write a program that calculates the sum of all the numbers in a given list.
- 18) Write a program that checks if a given number is a Fibonacci number.
- 19) Write a program that checks if a given string is a valid palindrome.
- 20) Write a program that checks if a given year is a leap year according to the Julian calendar.