School of Computing and Data Science
Sai University
Practice Set 2: C++ Basics

1. Write a program to print numbers from 1 to 10 using a `for` loop.
2. Print the first 10 even numbers using a `while` loop.
3. Print the multiplication table of a given number using a `do-while` loop.
4. Find the sum of the first N natural numbers (input N) using a `for` loop.
5. Write a program to find the factorial of a number using a `while` loop.
6. Print the digits of a number in reverse order using a `do-while` loop.
7. Check whether a number is prime or not using a `for` loop.
8. Print all odd numbers between 1 and 50 using a `while` loop.
9. Write a program that keeps asking the user for input until they enter a negative number (`do-while` loop).
10. Print the sum of all even numbers from 1 to 100 using a `for` loop.
11. Write a program to calculate the power of a number (a^b) using a `while` loop.
12. Use `if-else` with a loop: Print "Fizz" if a number is divisible by 3, "Buzz" if divisible by 5, and "FizzBuzz" if divisible by both (for numbers 1 to 50).
13. Take a number as input and check if it is an Armstrong number using a `while` loop.
14. Write a program to find the largest digit in a number using a `do-while` loop.
15. Print a simple pattern using loops:

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16. Use a `for` loop to check if a number is a palindrome.
17. Write a program to find the GCD (Greatest Common Divisor) of two numbers using a `while` loop.
18. Print the Fibonacci sequence up to N terms using a `for` loop.

19. Use `if-else` inside a `for` loop to print whether numbers from 1 to 20 are even or odd.
20. Write a program to keep taking marks as input until the user enters -1, then print the average of the entered marks.