# **EMBARKS SYSTEMATIC SAMPLING**

# Sheet 1

## Part A

1. Print odd numbers pattern using while loop

1

3 3

5 5 5

7 7 7 7

9 9 9 9 9

2) Write a Python program that uses a "while" loop to repeatedly ask the user to input a number until they input a negative number, and then prints out the sum of all the positive numbers they entered.

## Part B

## Hollow Square Pattern

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2) Write a Python program that uses a "for" loop to iterate over a list of numbers and prints out the sum of all the numbers that are divisible by 3 or 5.

## Part C

1) Create a class called Calculator with an add() method that can take either two integers or two floating-point numbers and returns their sum. Implement method overloading to handle both scenarios. Test the add() method by passing different combinations of integer and floating-point arguments.

2) Write a Python program that asks the user to input a letter of the alphabet, and then prints out whether that letter is a vowel or a consonant.