# EMBARKS SYSTEMATIC SAMPLING

# Sheet 6

## Part A

1)Reverse pyramid pattern

ABCDEFGHI

ABCDEFG

ABCDE

ABC

A

2) Write a Python function to check if a given number is a Fibonacci number.

## Part B

## 1) Pattern with a combination of numbers and stars

1 \* 2 \* 3 \* 4

1 \* 2 \* 3

1 \* 2

1

2) Implement a Python program to print all leap years within a given range of years.

## Part C

1. Design a program that simulates hierarchical inheritance for a music player application. Implement a base class called Media with attributes like title and duration. Create two child classes, Song and Podcast, that inherit from Media. Add specific attributes and methods to each child class to represent their unique characteristics and functionalities.
2. write a program to enter a number from the user and check if it amstrong number or not using while loop