## Lab 4

NOTICE: EVERY TASK WILL BE A BASH SCRIPT WITH NAME: Task\_XXXX.sh, where XXXX is the last 4 digits of your ID. It is not possible to identify the task otherwise and hence marks will be deducted.

Tasks:
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1. Print a bash script to generate the following pattern:

2. Print the Fibonacci series in terminal with a bash script:

Input: 5

Output: 11235

- 3. Write a bash script to find if a year is a leap year or not HINT: A leap year is either divisible by 400 or divisible by 4 but not divisible by 100.
- 4. Write a bash script to find the nearest leap year from the current year.

For example: If year 2023 is given as the input, then the nearest leap year is 2024. If 2021 is given the nearest leap year is 2020. If 2022 is given you can either print 2020 or 2024.

## 5. Write a bash script to check whether a given number is a prime number.

Input: 7

**Output:** "7 is a prime number"

Input: 10

Output: "10 is not a prime number"

## 6. Write a bash script to find and print all prime numbers between two given numbers (inclusive).

**Input:** 10 30

**Output:** 11 13 17 19 23 29