Lab 03 – 30-09-2024

Note 1: This is graded lab. Code in C++. Evaluation will be lenient but no compromise on cheating or any other violation. Therefore, please do your own work.

Note 2: Write code using single or nested loop, do not call any built-in function, you are also disallowed to create any function. Just use nested loop

Task 1: Print following number/ alphabet patterns, each in different programs: (For each pattern take input from user and generate pattern according to the input value). You may attempt these patterns in any order but try to keep file name relevant to each part.

a. **Rows: 5**
```
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15
16 17 18 19 20
21 22 23 24 25
```

b. **Rows: 3**
```
Column 6
1+2+3+4+5+6=21
1+3+5+7+9+11=36
1+4+7+10+13+16=51
```

c. **Rows: 5**
```
    1
   212
  32123
 4321234
543212345
```

d. **Rows: 3**
```
A B C D    In each line, print four alphabets only
E F G H
I J K L
```

Task 2: Print following patterns, each in different programs: (For each pattern take input from user and generate pattern according

a. **Rows: 3**
Columns: 6
```
* * * * * *
* * * * * *
* * * * * *
```

b. **Rows: 4**
```
*
* *
* * *
* * * *
```

c. **N: 5**
```
*         *
 *       *
  *     *
   * *
    *
```

d. **Rows: 4**
```
|_           _|
  |_       _|
    |_   _|
      |_|
```

Rows: 3
```
|_       _|
  |_   _|
    |_|
```