Pre-requisites

Basic C Programming
Data types, If else conditions, For loop, etc

Why we need patterns, Need for loops,

TDM_001_Square_Pattern
Enter No of Rows : 4

```
*  *  *  *
*  *  *  *
*  *  *  *
*  *  *  *
```

TDM_002_Star_Pattern
Enter No of Rows : 5
```
*          - 1
* *
* * *
* * * *
* * * * *  - 5
```

TDM_003_Star_Double
Enter No of Rows : 4
```
* *            - 1 X 2
* * * *
* * * * * *
* * * * * * * *  - 4X 2
```

H/W 1
```
* * *          - 1 X 3
* * * * * *
* * * * * * * * *
```

TDM_004_Star_Pattern_decreasing
Enter No of Rows : 4
* * * * 4
* * * 3
* *2
*1

H/W 2
* * * * * * * *
* * * * * *
* * * *
* *

TDM_005_Number
Enter No of Rows : 5
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5

H/W 3
1 1 1 1 1
2 2 2 2 2
3 3 3 3 3
4 4 4 4 4
5 5 5 5 5

TDM_006_number_pattern
Enter limit : 5
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5

H/W 4
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5

TDM_007_//Decreasing Number Pattern
Enter limit : 5
5
4 5
3 4 5
2 3 4 5
1 2 3 4 5

H/W 5
//Decreasing Number Pattern
Enter limit : 5
5
5 4
5 4 3
5 4 3 2
5 4 3 2 1

TDM_008_Star
Enter No of Rows : 5
*1 - 1 (1-1)*2+1=1
* * *3 -2 - (2-1)*2+1=3
* * * * *5 - 3
* * * * * * *7
* * * * * * * * *9
H/W 6
Enter No of Rows : 5
1
1 2 3

1 2 3 4 5
1 2 3 4 5 6 7
1 2 3 4 5 6 7 8 9

TDM_009_Alphabets
Enter No of Rows : 5
A 97
A B 98
A B C 99
A B C D 100
A B C D E 101

H/W 7

20_number_pattern
Enter Number of rows : 5
1
2   3
4   5   6
7   8   9   10
11   12   13   14   15

F or E Patterns

Question 1

```
* * * 3
*
*
* * * * * * 6
*
*
* * * * * * * * * 9
*
*
```

Question 2

```
X X X X X X - 6
X 1
X X X X  4
X 1
XX 2
X 1
```

Question 3

```
* * 2
* 1
* * * * 4
* 2
*
* * * * * * 6
* 3
*
*
```

Question 4
* 1
**** 4
*2
*
******** 8
* 3
*
*
************ 12 (3 X 4)
Question 5   1, 3, 6, 10, 15
               2 3
* 1
* 1 X 1

* * * 3
* * 2X2
* *

* * * * * 5
* * * 3 X 3
* * *
* * *

Question 6
***** 5
* 3
*
*
********** 10
*
*
*

```
  *
  *
  * 6
*************** 15
```

Question 7

```
* * 2

* 1

* * * * * 5

* *

* * 2 X 2

* * * * * * * * 8

* * *

* * *

* * * 3 X 3

* * * * * * * * * * * 11
```

Skip 4 X 4

2 (3X1-1)

5 (3*2-1

8 (3*3-1

11 (3*4-1)

Question 8

1 - * * * * * 5 (i%2 == 0) 3*

      Else 5*

* 1 x 1

2 - * * * 3

* * 2 X 2

* *

3 -* * * * * 5

* * * 3X3

* * *

* * *

4 - * * *

4X4 skip