Programs on Patterns

Basic Logic for Pattern Programming

➢ There is a typical structure to print any pattern, i.e. the number of rows and column in the pattern.

➢ Outer loop tells us the number of rows used and inner loop tells us the column used to print pattern.

Basic Logic for Pattern Programing

➢ Accept the number rows user want to print in the pattern.

➢ Iterate those number using outer for loop to handle the number of rows.

➢ Inner loop to handle the number of columns.

➢ Inner loop iteration depends on the values of the outer loop.

➢ Print number, asterisk, Pyramid and diamond pattern using the print() function.

➢ Add a new line after each row, i.e. after each iteration of outer for loop so you can display pattern appropriately.

Pattern Programs

1.
```
*
* *
* * *
* * * *
* * * * *
```

2.
```
        *
       * *
      * * *
     * * * *
    * * * * *
```

3.
```
      *
     * *
    * * *
   * * * *
  * * * * *
```

4.
```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

5.
```
1
2  3
4  5  6
7  8  9 10
11 12 13 14 15
```

Pattern Programs

6.

A
B B
C C C
D D D D
E E E E E

7.

A
B C
D E F
G H I J
K L M N O

8.

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

9.

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

10.

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

Pattern Programs

11.
```
    *
   * *
  * * *
 * * * *
* * * * *
 * * * *
  * * *
   * *
    *
```

12.
```
* * * * *
* * * *
* * *
* *
*
* *
* * *
* * * *
* * * * *
```

13.
```
* * * * *
 * * * *
  * * *
   * *
    *
   * *
  * * *
 * * * *
* * * * *
```

14.
```
      1
    1 2 1
  1 3 3 1
1 4 6 4 1
```

Pattern Programs

15.

	*	*	*	
*				*
*				*
*	*	*	*	*
*				*
*				*
*				*