Day-06 [25/Oct/2023]

Pattern

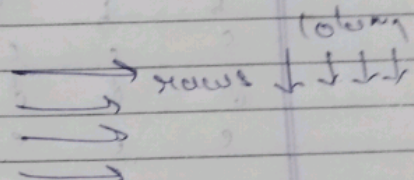First Pattern: Rectangle :

(1)
```
* * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

```
for(j=1; j≤5; j=j+1) {
    for(i=1; i≤5; i=i+1) {
        cout<<"*"<<" ";
    }
    cout<<endl;
}
```

Steps

① rows = 1
2   rows ≤ 5
3   Print * 5 times
4   rows = rows + 1

→ rows ↓↓↓↓

(2)
```
1 1 1 1
2 2 2 2
3 3 3 3
4 4 4 4
5 5 5 5
```

```
for(rows=1; rows≤5; rows++) {
    for(col=1; col≤5; col++) {
        cout<<rows<<" ";
    }
    cout<<endl;
}
```

(3)
```
1 2 3 4
1 2 3 4
1 2 3 4
1 2 3 4
1 2 3 4
```

```
for(rows=1; rows≤5; rows++) {
    for(col=1; col≤5; col++) {
        cout<<col<<" ";
    }
    cout<<endl;
}
```

(4)

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

```
for(row=1; row<=5; row++){
  for(col=5; col>=1; col--){
    cout<<col<<" ";
  }
  cout<<endl;
}
```

(5)

```
a    a    a    a
b    b    b    b
c    c    c    c
d    d    d    d
e    e    e    e
```

```
for(row=1; row<=5; row++){
  char name='a'+row-1;
  for(col=1; col<=5; col++){
    cout<<col<<" ";
  }
  cout<<endl;
}
```

(6)

```
a    a    a    a
b    b    b    b
c    c    c    c
d    d    d    d
e    e    e    c
```

```
for(row=1; row<=5; row++){
  char name='a';
  for(col=1; col<=5; col++){
    cout<<name+col-1<<" ";
  }
  cout<<endl;
}
```

(7)

```
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
```

```
int i=1;
for(row=1; row<=5; row++){
  for(col=1; col<=5; col++){
    cout<<i;
    i++;
  }
  cout<<endl;
}
```