

## Pattern programming – Decrementing loops !!

### // Increasing triangle stars

```
#include <stdio.h>
int main() {

    int n = 0;
    printf("\n Enter the number of rows:");
    scanf("%d", &n);
    for(int i = n; i >= 1; i--)
    {
        for(int j = n; j >= i; j--)
        {
            printf("* ");
        }
        printf("\n");
    }
    return 0;
}
```

### //Decreasing triangle stars

```
#include <stdio.h>
int main() {

    int n = 0;
    printf("\n Enter the number of rows:");
    scanf("%d", &n);
    for(int i = n; i >= 1; i--)
    {
        for(int j = i; j >= 1; j--)
        {
            printf("* ");
        }
        printf("\n");
    }
    return 0;
}
```

**// Mirror image – Decrementing triangle stars**

```
#include <stdio.h>
int main() {

    int n = 0;
    printf("\n Enter the number of rows:");
    scanf("%d", &n);
    for(int i = n; i >= 1; i--)
    {
        for(int k = n; k >= i; k--)
        {
            printf(" ");
        }
        for(int j = i; j >= 1; j--)
        {
            printf("* ");
        }
        printf("\n");
    }
    return 0;
}
```

**//Mirror image – Incrementing triangle stars**

```
#include <stdio.h>
int main() {
    int n = 0;
    printf("\n Enter the number of rows:");
    scanf("%d", &n);
    for(int i = n; i >= 1; i--)
    {
        for(int k = i; k >= 1; k--)
        {
            printf(" ");
        }
        for(int j = n; j >= i; j--)
        {
            printf("* ");
        }
        printf("\n");
    }
    return 0;
}
```

#### // Hill

```
#include <stdio.h>
int main() {
    int n = 0;
    printf("\n Enter the number of rows:");
    scanf("%d", &n);
    for(int i = n; i >= 1; i--)
    {
        for(int k = i; k >= 1; k--)
        {
            printf(" ");
        }
        for(int j = n; j >= i; j--)
        {
            printf("* ");
        }
        for(int m = n; m > i ;m--)
        {
            printf("* ");
        }
        printf("\n");
    }
    return 0;
}
```

#### // Inverted Hill

```
#include <stdio.h>
int main() {
    int n = 0;
    printf("\n Enter the number of rows:");
    scanf("%d", &n);
    for(int i = n; i >= 1; i--)
    {
        for(int k = n; k >= i; k--)
        {
            printf(" ");
        }
        for(int j = i; j >= 1; j--)
        {
            printf("* ");
        }
        for(int m = i; m > 1 ;m--)
        {
            printf("* ");
        }
        printf("\n");
    }
    return 0;
}
```

#### // Diamond

```
#include <stdio.h>
int main() {
    int n = 0;
    printf("\n Enter the number of rows:");
    scanf("%d", &n);
    for(int p = n; p >= 1; p--)
    {
        for(int q = p; q >= 1; q--)
        {
            printf(" ");
        }
        for(int r = n; r >= p; r--)
        {
            printf("* ");
        }
        for(int s = n; s > p ;s--)
        {
            printf(" ");
        }
        printf("\n");
    }
    for(int i = n; i >= 1; i--)
    {
        for(int k = n; k >= i; k--)
        {
            printf(" ");
        }
        for(int j = i; j >= 1; j--)
        {
            printf("* ");
        }
        for(int m = i; m > 1 ;m--)
        {
            printf(" ");
        }
        printf("\n");
    }
    return 0;
}
```

#### // Double hill

```
#include <stdio.h>
int main() {
    int n = 0;
    printf("\n Enter the number of rows:");
    scanf("%d", &n);
    for(int p = n; p >= 1; p--)
```