

Q.1 Write a Program to print the below pattern using nested for loop.

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

Ans: #include<stdio.h>

```
int main()
{
    int i, j;
    for(i = 1; i <= 5; i++)
    {
        for(j = i; j >= 1; j--)
        {
            printf("%d ", j);
        }
        printf("\n");
    }
    return 0;
}
```

O\p: /tmp/PISVnbnVlx.o

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

=== Code Execution Successful ===

Q.2 Write a Program to print the below pattern using nested for loop.

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

Ans: #include<stdio.h>

```
int main()
{
    int i, j;
```

```

for(i = 5; i >= 1; i--)
{
    for(j = i; j <= 5; j++)
    {
        printf("%d ", j);
    }
    printf("\n");
}
return 0;
}
O\p: /tmp/D6fw50fs4F.o
5
4 5
3 4 5
2 3 4 5
1 2 3 4 5

```

=== Code Execution Successful ===

Q.3 Write a Program to print the below pattern using nested for loop.

```

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

```

Ans: #include<stdio.h>

```

int main()
{
    int i, j;
    for(i = 5; i >= 1; i--)
    {
        for(j = 5; j >= i; j--)
        {
            printf("%d ", i);
        }
        printf("\n");
    }
    return 0;
}
O\p: /tmp/ywFdIpLsoM.o
5
4 4
3 3 3

```

```
2 2 2 2
1 1 1 1 1
```

=== Code Execution Successful ===

Q.4 Write a Program to print the below pattern using nested for loop.

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

Ans: #include<stdio.h>

```
int main()
{
    int i, j;
    for(i = 1; i <= 5; i++)
    {
        for(j = i; j <= 5; j++)
        {
            printf("%d ", j);
        }
        printf("\n");
    }
    return 0;
}
```

O\p : /tmp/3hplLZYrYh.o

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

=== Code Execution Successful ===

Q.5 Write a Program to print the below pattern using nested for loop.

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

Ans: #include<stdio.h>

```
int main()
```

```

{
    int i, j;
    for(i = 1; i <= 5; i++)
    {
        for(j = 5; j >= i; j--)
        {
            printf("%d ", i);
        }
        printf("\n");
    }
    return 0;
}

```

O\p: /tmp/E3WTUQYHUd.o

1 1 1 1 1

2 2 2 2

3 3 3

4 4

5

=== Code Execution Successful ===

Q.6 Write a Program to print the below pattern using nested for loop.

1 0 1 0 1

1 0 1 0

1 0 1

1 0

1

Ans: #include<stdio.h>

```

int main()
{
    int i, j;
    for(i = 5; i >= 1; i--)
    {
        for(j = 1; j <= i; j++)
        {
            if(j % 2 == 1)
            {
                printf("1 ");
            }
            else
            {
                printf("0 ");
            }
        }
    }
}

```

```

    }
}
printf("\n");
}
return 0;
}
O\p: /tmp/8L7t8Mz9fp.o
1 0 1 0 1
1 0 1 0
1 0 1
1 0
1

```

=== Code Execution Successful ===

Q.7 Write a Program to print the below pattern using nested for loop.

```

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

```

Ans #include <stdio.h>

```

int main() {

    for (int i = 0; i < 5; i++) {
        char ch = 'A' + i;
        for (int j = 0; j <= i; j++) {
            printf("%c ", ch - j);
        }
        printf("\n");
    }
}

```

```

    return 0;
}
o\p:/tmp/d10pFTlwh4.o
A
B A
C B A
D C B A
E D C B A

```

Q.8 Write a Program to print the below pattern using nested for loop.

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

Ans #include <stdio.h>

```
int main() {
    int k = 1;
    for(int i = 1; i <= 5; i++) {
        for(int j = 1; j <= i; j++) {
            printf("%3d", k);
            k++;
        }
        printf("\n");
    }
    return 0;
}
```

O\p /tmp/lsU7tyPFPj.o

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

=== Code Execution Successful ===