

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:

// Online C compiler to run C program online

```
#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:

```
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:

// Online C compiler to run C program online

```
#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:

```

5
45
345
2345
12345

```

=== 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:

// Online C compiler to run C program online
#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:

```
5
44
333
2222
11111
```

=== 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:

// Online C compiler to run C program online

```
#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:

```
12345
2345
345
45
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:

// Online C compiler to run C program online

```
#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:

```
11111
2222
333
44
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:

// Online C compiler to run C program online

```
#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;

10101

1010

101

10

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:

// Online C compiler to run C program online

```
#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:

A
BA
CBA
DCBA
EDCBA

=== Code Execution Successful ===

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 :

// Online C compiler to run C program online

```
#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:

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

=== Code Execution Successful ===

