**1. Get the values from the user and store it in 3\*3 matrix. Display the matrix.**

Sample Output:  
1 2 3  
4 5 6  
7 8 9

#include <stdio.h>

int main()

{

int matrix[3][3];

int i, j;

printf("Enter the elements of the 3x3 matrix:\n");

for (i = 0; i < 3; i++) {

for (j = 0; j < 3; j++) {

scanf("%d", &matrix[i][j]);

}

}

printf("\nThe entered matrix is:\n");

for (i = 0; i < 3; i++)

{

for (j = 0; j < 3; j++)

{

printf("%d ", matrix[i][j]);

}

printf("\n");

}

return 0;

}

**2. Write a program to get the output**

Input: a1b10  
Output: abbbbbbbbb

Input: b3c6d15  
Output: bbbccccccddddddddddddddd

#include <stdio.h>

int main()

{

char input[100];

int i, count, num;

printf("Enter the input string: ");

scanf("%s", input);

i = 0;

while (input[i] != '\0')

{

count = 0;

num = 0;

char ch = input[i++];

while (input[i] >= '0' && input[i] <= '9')

{

count = count \* 10 + (input[i] - '0');

i++;

}

if (count == 0) {

printf("%c", ch);

}

Else

{

// Print the character 'count' times

for (num = 0; num < count; num++) {

printf("%c", ch);

}

}

}

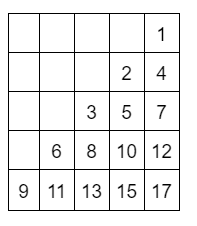
printf("\n");

return 0;

}

**3. Print the pattern without using arrays.**

\*



#include <stdio.h>

int main() {

int i, j, num = 1;

for (i = 1; i <= 5; i++) {

for (j = 1; j <= 5 - i; j++) {

printf(" ");

}

printf("%d", num);

for (j = 1; j <= 2 \* i - 3; j++) {

num += 2;

printf("%d", num);

}

printf("\n");

num = i + 1;

}

return 0;

}