Pattern5

Write a C program that reads in a positive number on height between 1 and 9, and prints a triangular pattern according to height. For example, if height is 9, then the following pattern will be printed. There is no need to check user input errors.

```
        +
       =+=
      +=+=+
     =+=+=+=
    +=+=+=+=+
   =+=+=+=+=+=
  +=+=+=+=+=+=+
 =+=+=+=+=+=+=+=
+=+=+=+=+=+=+=+=+
```

A sample program template is given below:

```c
#include <stdio.h>
int main()
{
    /* Write your code here */
    return 0;
}
```

Sample input and output sessions are given below:
(1) Test Case 1:
```
Enter the height:
5
The pattern is:
    +
   =+=
  +=+=+
 =+=+=+=
+=+=+=+=+
```

(2) Test Case 2:
```
Enter the height:
8
The pattern is:
       +
      =+=
     +=+=+
    =+=+=+=
   +=+=+=+=+
  =+=+=+=+=+=
 +=+=+=+=+=+=+
=+=+=+=+=+=+=+=
```

```c
#include <stdio.h>
int main()
{
    int num,height,i,count;

    printf("Enter the height:\n");
    scanf("%d",&height);
    printf("The pattern is:\n");

    for(i=0;i<height;i++)
    {
        count = height-1-i;
        while(count!=0)
        {
            printf(" ");
            count--;
        }
        num = (i+1)*2 -1;
        while(num!=0)
        {
            if((i+1)%2==1)
            {
                if(num%2==1)
                {
                    printf("+");
                    num--;
                }
                else if(num%2==0)
                {
                    printf("=");
                    num--;
                }
            }
            if((i+1)%2==0)
            {
                if(num%2==1)
                {
                    printf("=");
                    num--;
                }
                else if(num%2==0)
                {
                    printf("+");
                    num--;
                }
            }
        }
        printf("\n");
    }
    return 0;
}
```