

INTRODUCTION TO PROGRAMING USING

C

ASSIGNMENT – II QUESTION - I

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Submission Date

18 September 2023

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C PROGRAM TO GENERATE TRIANGLE PATTERN

Code Overview

This C program is a simple example that prints a pattern of a triangular shape. It uses nested loops to achieve this pattern.

Code

```
#include<stdio.h>

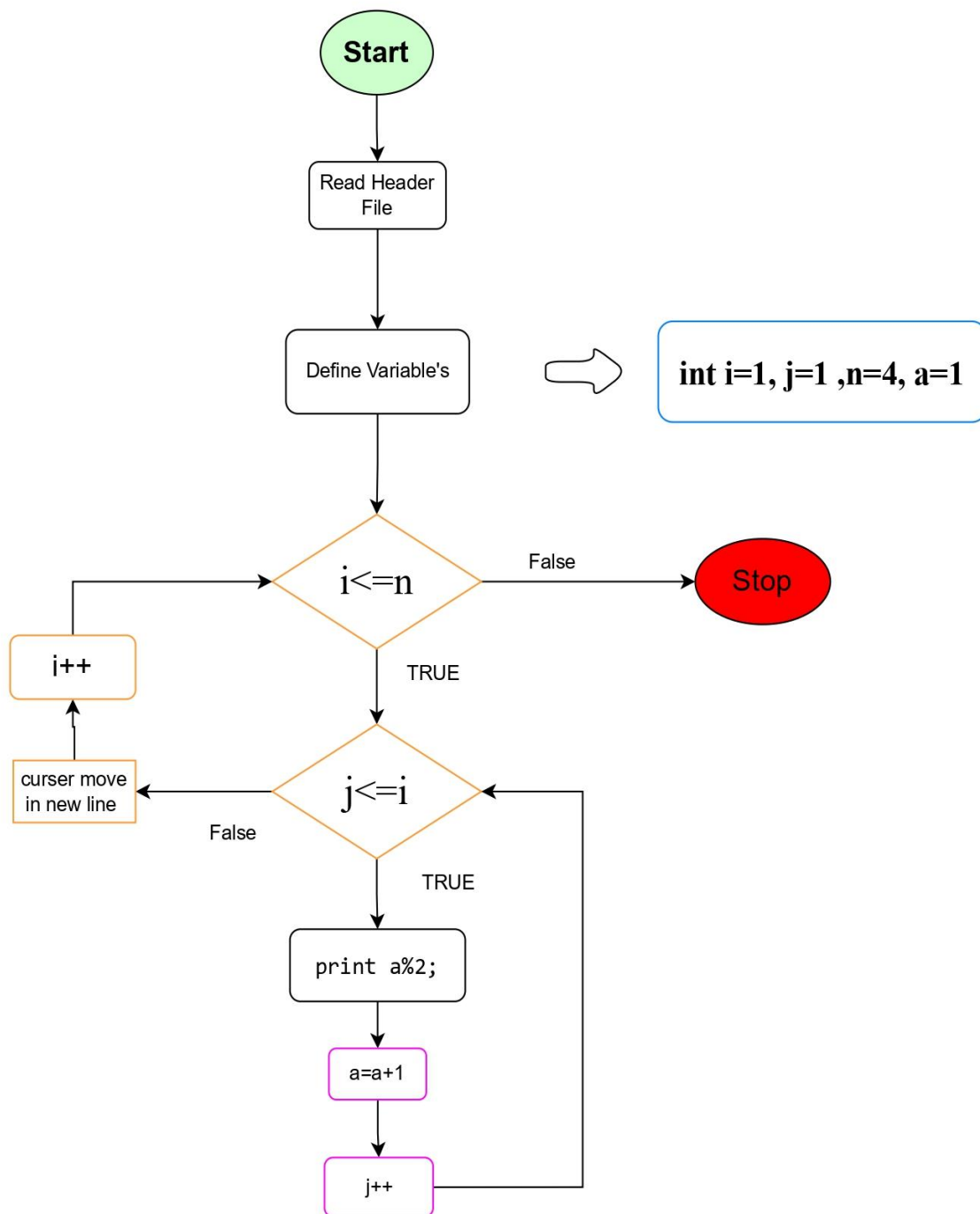
int main()
{
    int i, j, n=4, a;
    a = 1;
    for(i=1;i<=n;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%d", a%2);
            a++;
        }
        printf("\n");
    }

    return 0;
}
```

OUTPUT

```
1
01
010 |
1010
```

Flowchart



C PROGRAM TO GENERATE A PYRAMID PATTERN

Code Overview

This C program generates a pyramid pattern using star (*). It consists of two parts: the first part prints an increasing number of star in each row, and the second part prints a decreasing number of star in each row.

CODE

```
#include <stdio.h>
int main()
{
    int n, i, j;

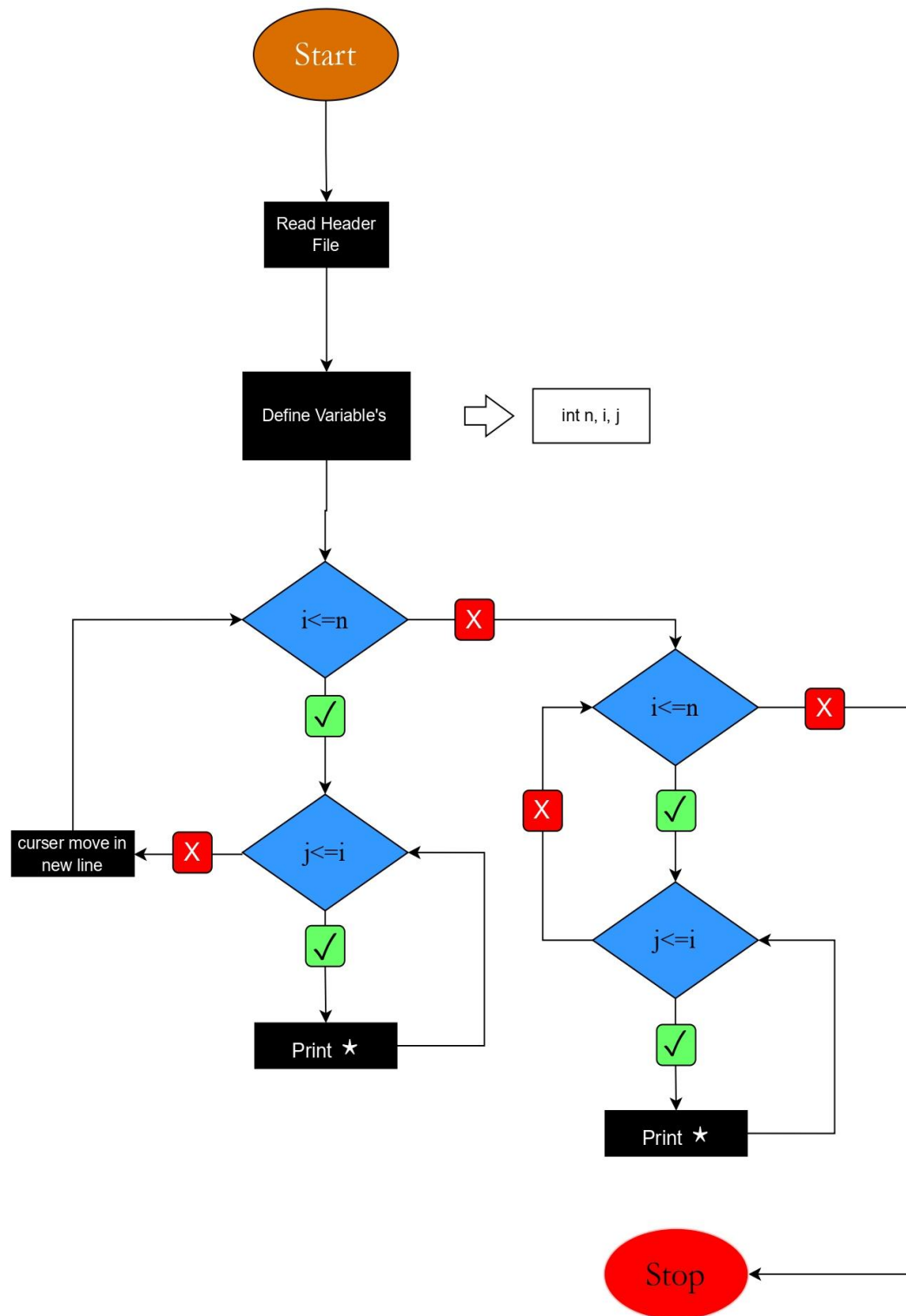
    n = 5;
    for (i = 1; i <= n; i++)
    {
        for (j = 1; j <= i; j++)
        {
            printf("*");
        }
        printf("\n");
    }
    for (i = n - 1; i >= 1; i--)
    {
        for (j = 1; j <= i; j++)
        {
            printf("*");
        }
        printf("\n");
    }

    return 0;
}
```

Output

```
*
**
***
****
*****
****
***
**
*
```

Flowchart



GENERATING CHARACTER PATTERN

Code Overview

This C program generates a character pattern (ASCII) and incrementing in each row. It prints a triangular pattern of characters.

CODE

```
#include<stdio.h>

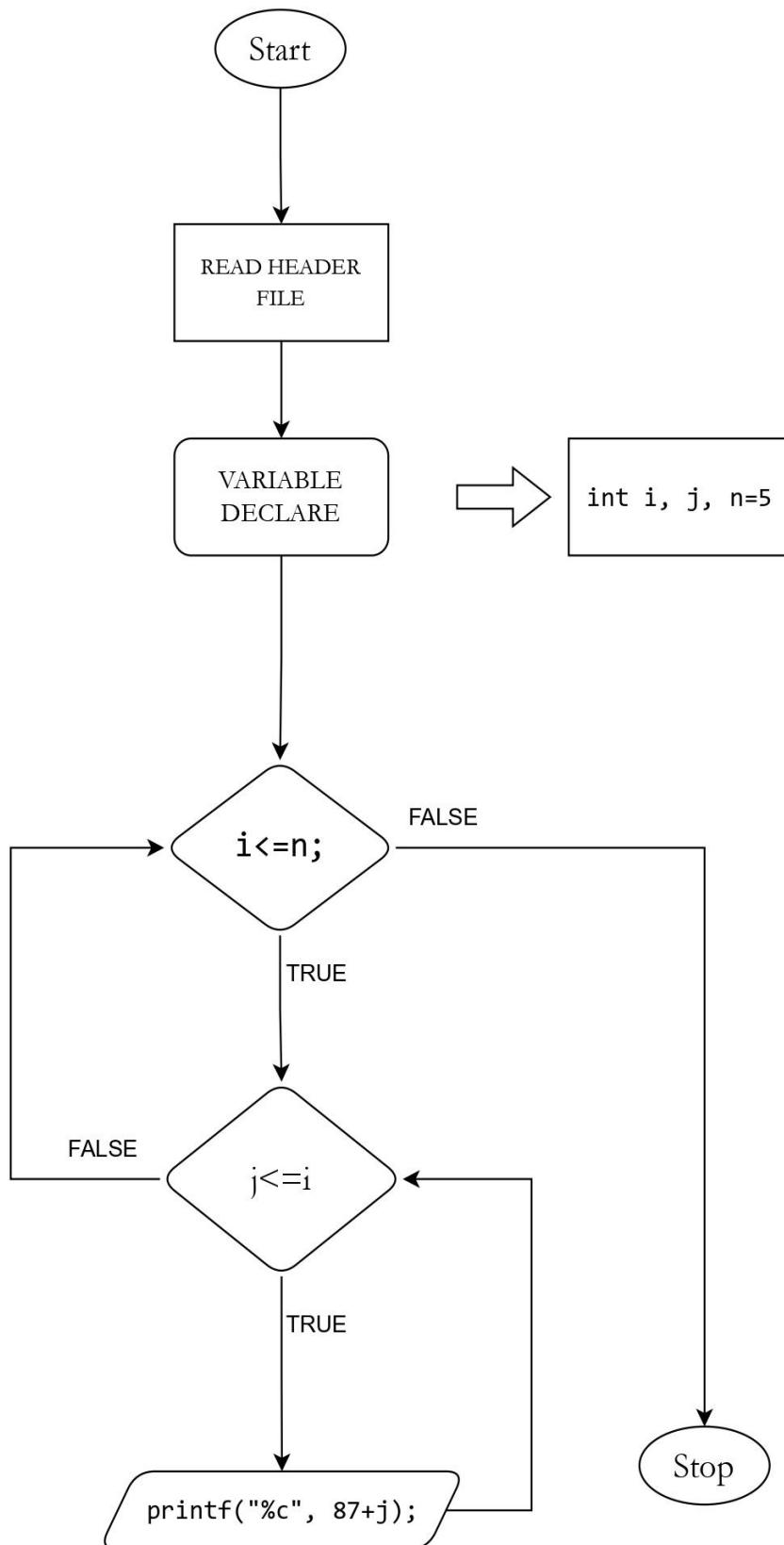
int main()
{
    int i, j, n=5;
    for(i=1;i<=n;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%c", 87+j);
        }
        printf("\n");
    }

    return 0;
}
```

OUTPUT

```
X
XY
XYZ
XYZ[
XYZ[\
```

Flowchart





Thankyou