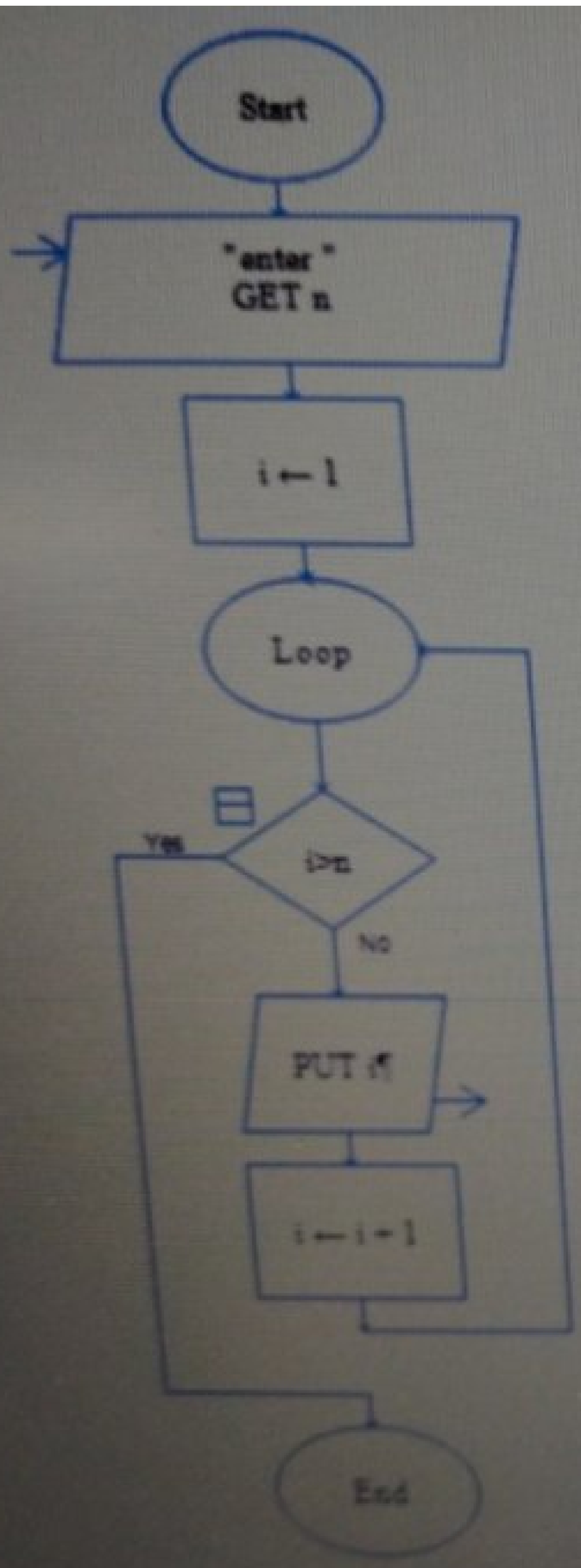
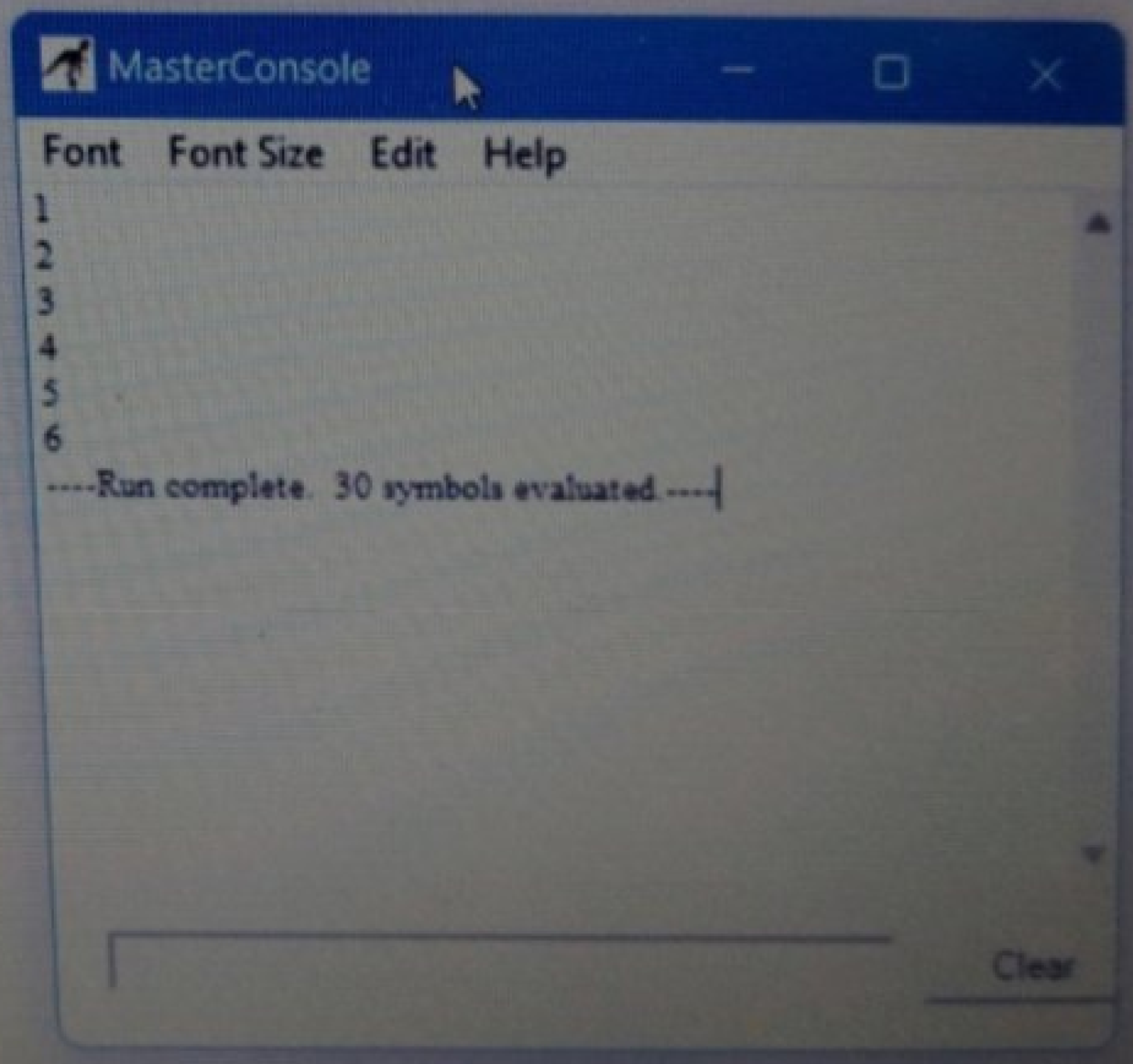
main.c

```c
#include <stdio.h>

void main()
{
    int n;
    printf("enter the number :");
    scanf("%d",&n);
    for ( int i=0;i<=n;i++)
    {
        printf(" %d",i);
    }
}

```

input

```
enter the number :8
 0 1 2 3 4 5 6 7 8

...Program finished with exit code 0
Press ENTER to exit console.
```





1) Step 1 - Begin

Step 2 - declare into variable

Step 3 - Read value

step 4 - condition (i=1; i<=a; i++)

Step 5 - print the variable

step 6 - end

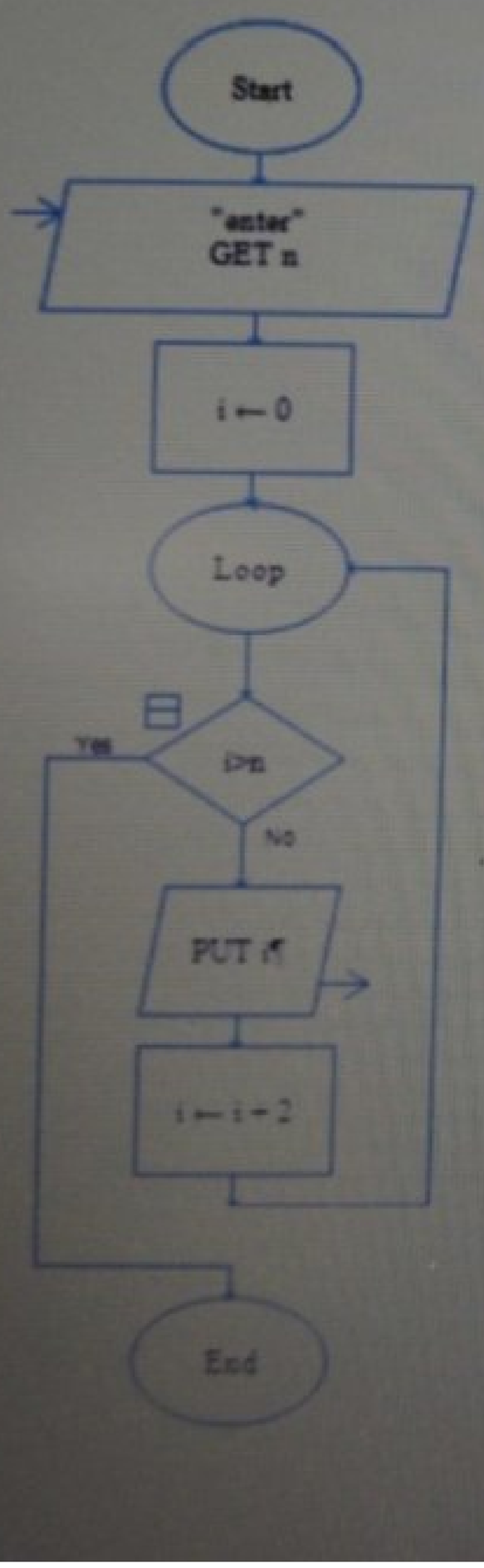
main.c

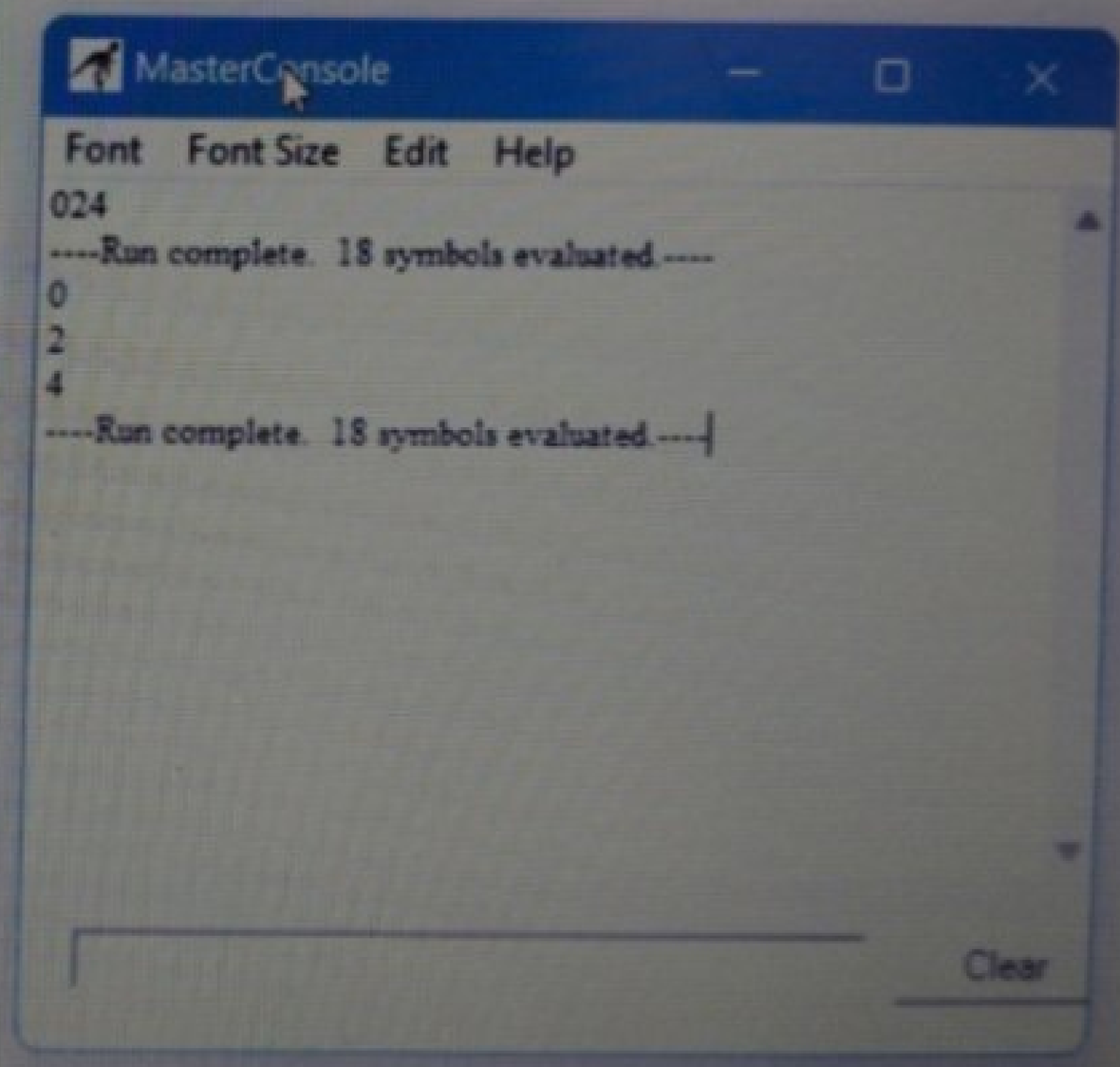
```c

#include <stdio.h>

void main()
{
    int n,i,j;
    printf("enter the number ");
    scanf("%d",&n);
    for(i=0;i<=n;i=i+2)
    {printf("  %d",i);
}
}

```

input

```
enter the number 8
  0  2  4  6  8

...Program finished with exit code 0
Press ENTER to exit console.
```

main





2) step 1 - begin

step 2 - declare into variable

step 3 - Read value

step 4 - condition (i·1·2 = =0)

step 5 - print the variable

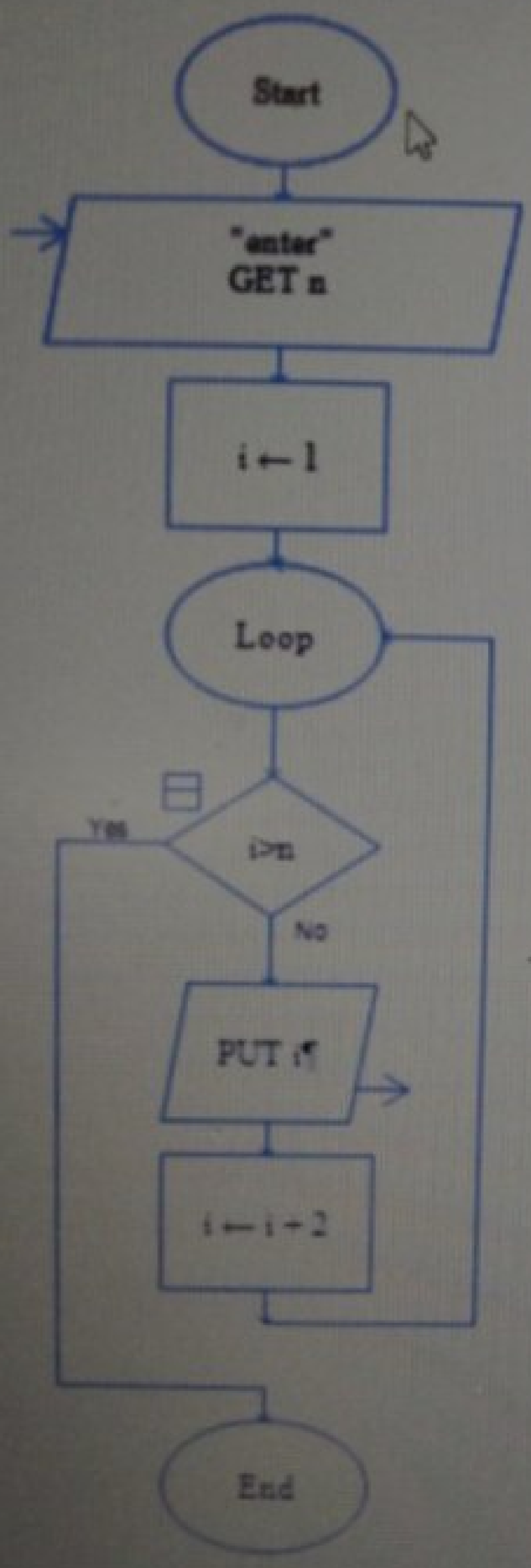
step 6 - end

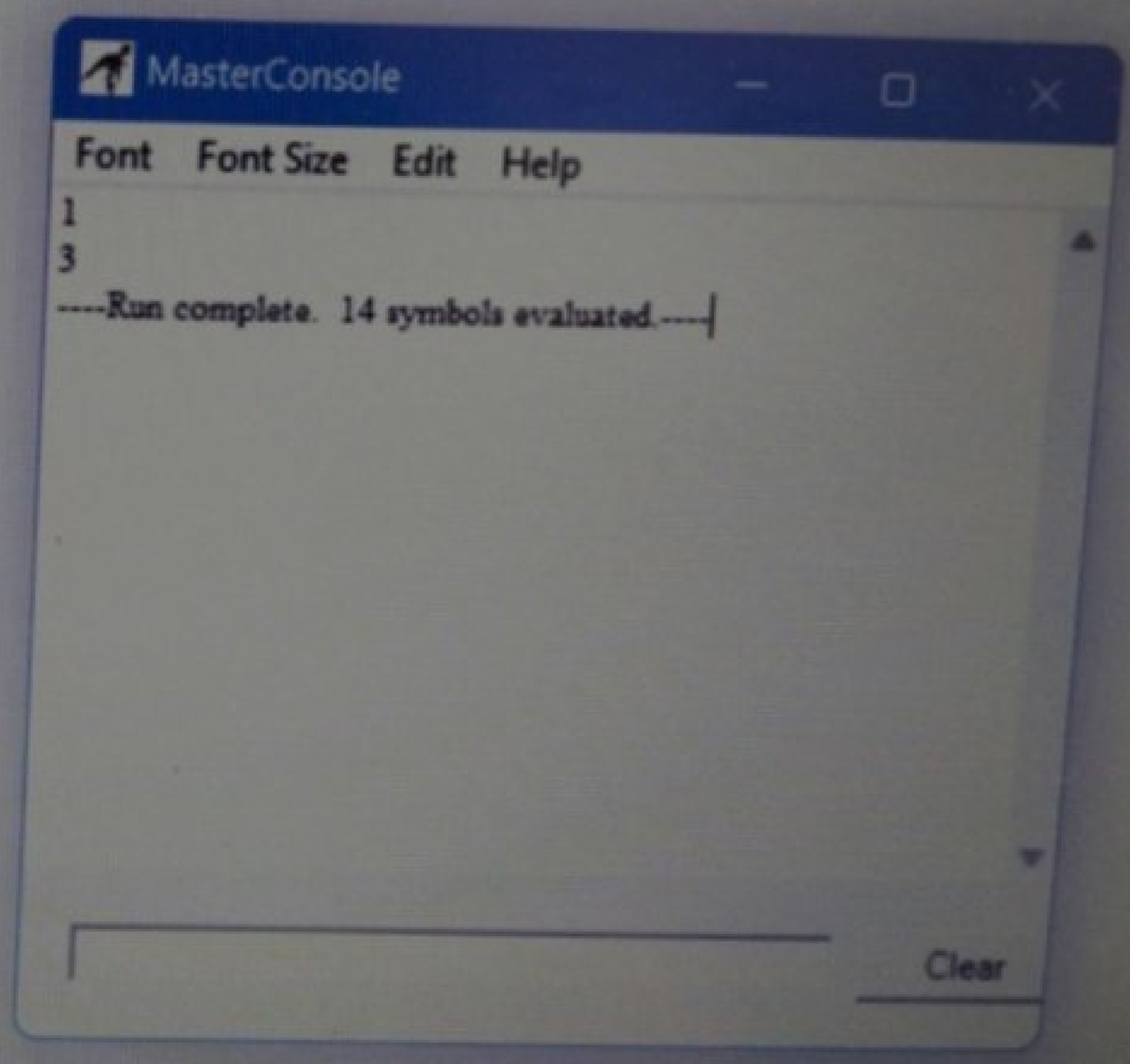
main.c

```c
#include <stdio.h>

void main()
{
    int n,i,j;
    printf("enter the number ");
    scanf("%d",&n);
    for(i=1;i<=n;i=i+2)
    {printf("  %d",i);
}
}
```

input

```
enter the number 8
  1  3  5  7

...Program finished with exit code 0
Press ENTER to exit console.
```





3)

step 1 - begin

step 2 - declare into variable

step 3 - Read value

step 4 - condition (i.1.2 ==0)

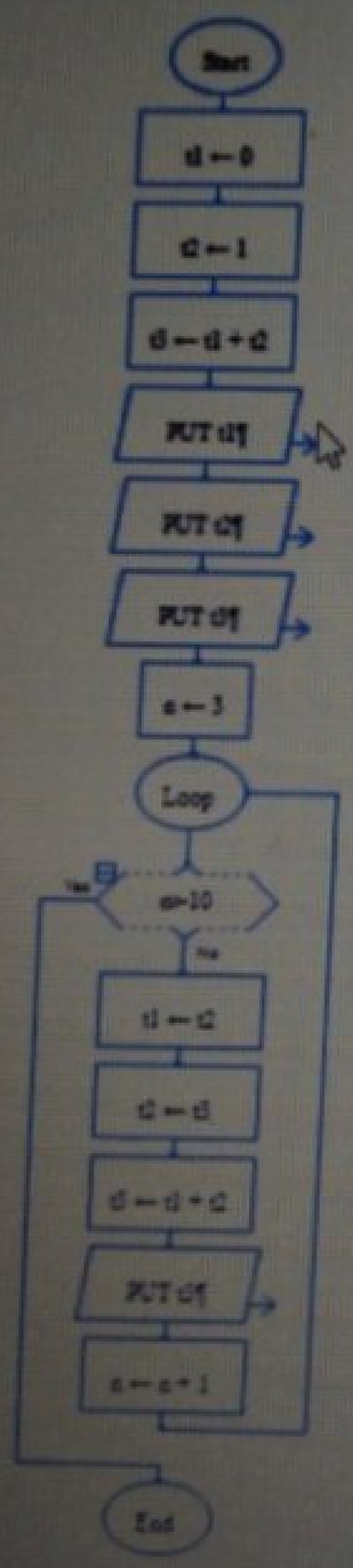
step 5 - print the value

step6 - END

```c
#include <stdio.h>

void main()
{
    int a=0 ,b=1,n,t ;
    printf("enter the number ");
    scanf("%d",&n);
    while(a<=n){
    printf("%d,",a);

    t=a;
    a=b;
    b=b+t;
    }
}
```

```
enter the number 5
0,1,1,2,3,5,

...Program finished with exit code 0
Press ENTER to exit console.
```

main



MasterConsole

Font Font Size Edit Help

0
1
1
2
3
5
8
13
21
34
55
----Run complete. 67 symbols evaluated.----

Clear

4) Step 1 - begin

Step 2 - Declare the variable

Step 3 - Start a loop that if from 1 ton

Step 4 - Read the variable

Step 5 - print the values

Step 6 - END

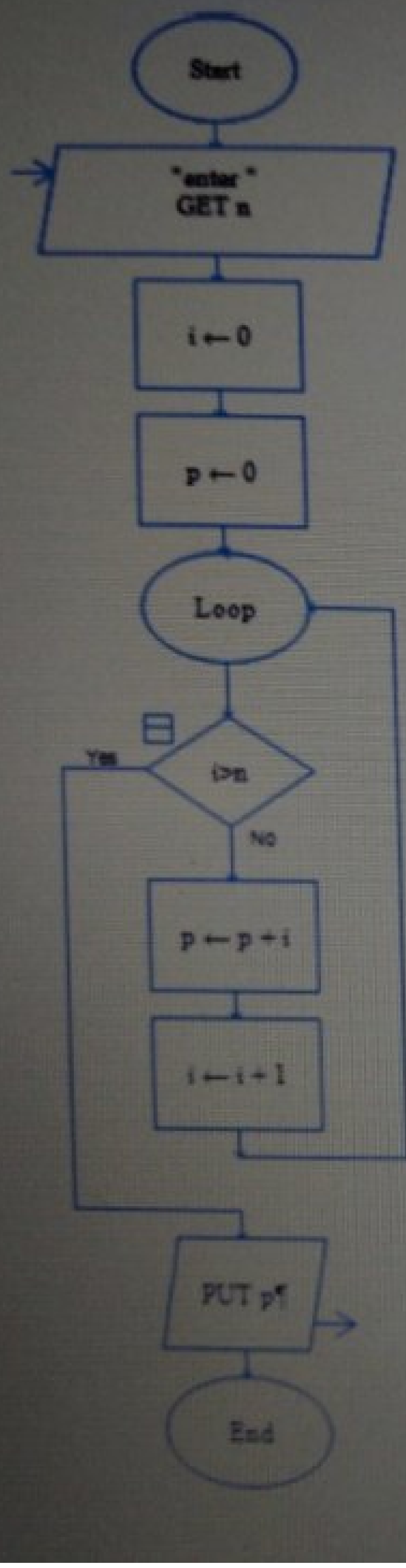
Run Debug Stop Share Save { } Beautify

main.c

```c

#include <stdio.h>

void main()
{
    int n ,i;
    int a=0;
    printf("enter the number :");
    scanf("%d",&n);
    for(i=0;i<=n;i++)
    {a=a+i;
    }
    printf("%d",a);

}

```

input

```
enter the number :5
15

...Program finished with exit code 0
Press ENTER to exit console.
```



MasterConsole

Font Font Size Edit Help

```
Can't compare those values: NUMBER_KIND STRING_KIND
----Error, run halted----
0
1
3
6
10
----Run complete.  32 symbols evaluated.----
10
----Run complete.  28 symbols evaluated.----
15
----Run complete.  32 symbols evaluated.----
15
----Run complete.  32 symbols evaluated.----
```

Clear

5) step 1 - Begin

step 2 - declare in the variable

step 3 - start a loop that from 1 ton

step 4 - Each

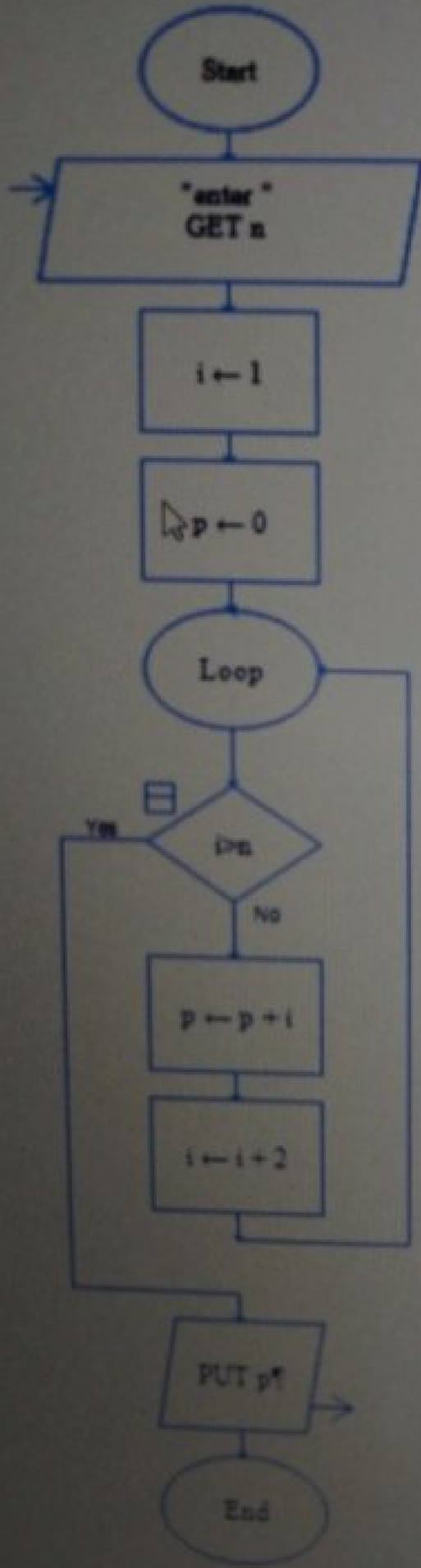
step 5 - print the values

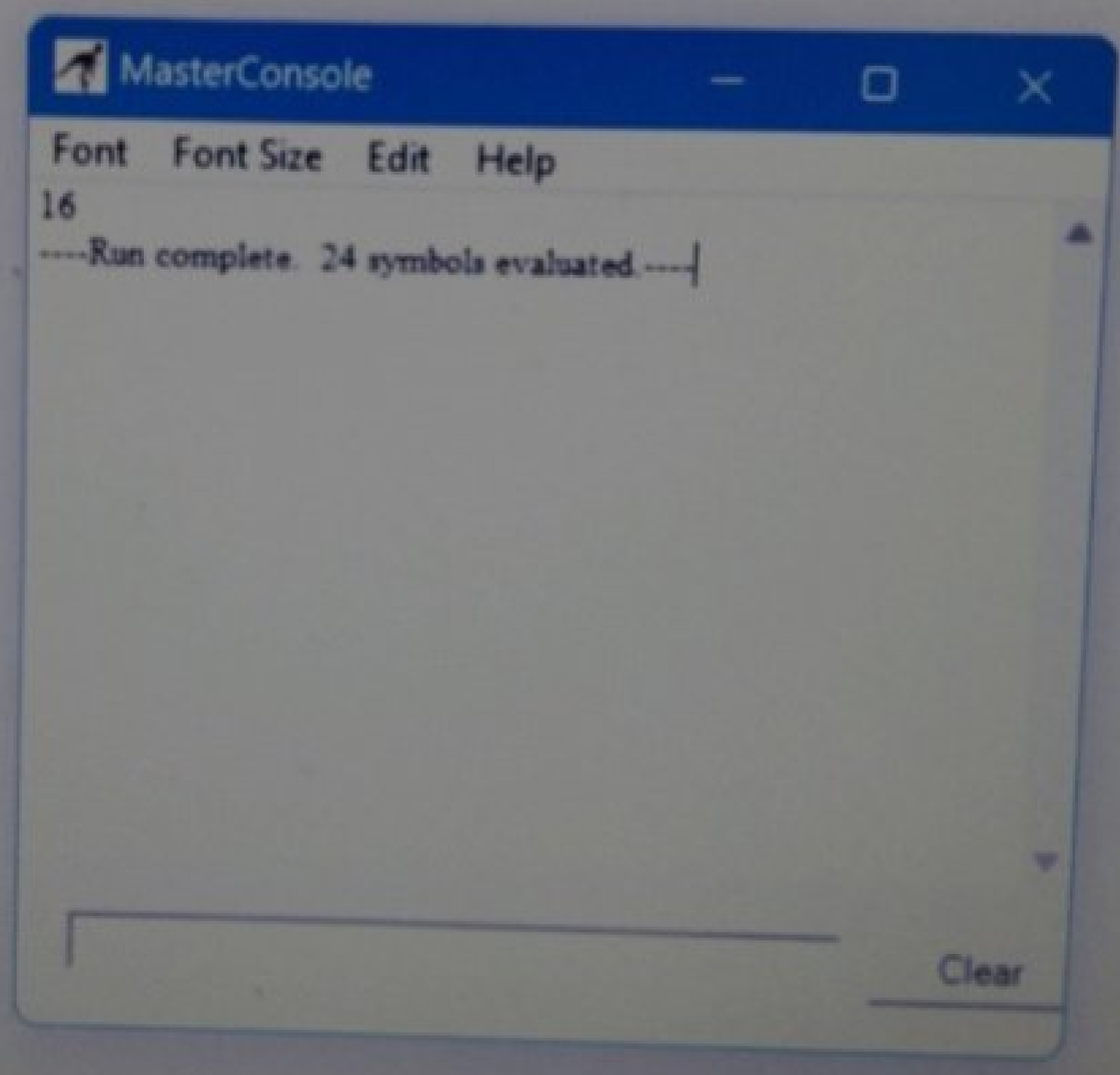
step 6 - END

main.c

```c

#include <stdio.h>

void main()
{
    int n ,i;
    int a=0;
    printf("enter the number :");
    scanf("%d",&n);
    for(i=0;i<=n;i=i+2)
    {a=a+i;
    }
    printf("%d",a);

}

```

```
enter the number :4
6

...Program finished with exit code 0
Press ENTER to exit console.
```





6) Step 1 - Begin

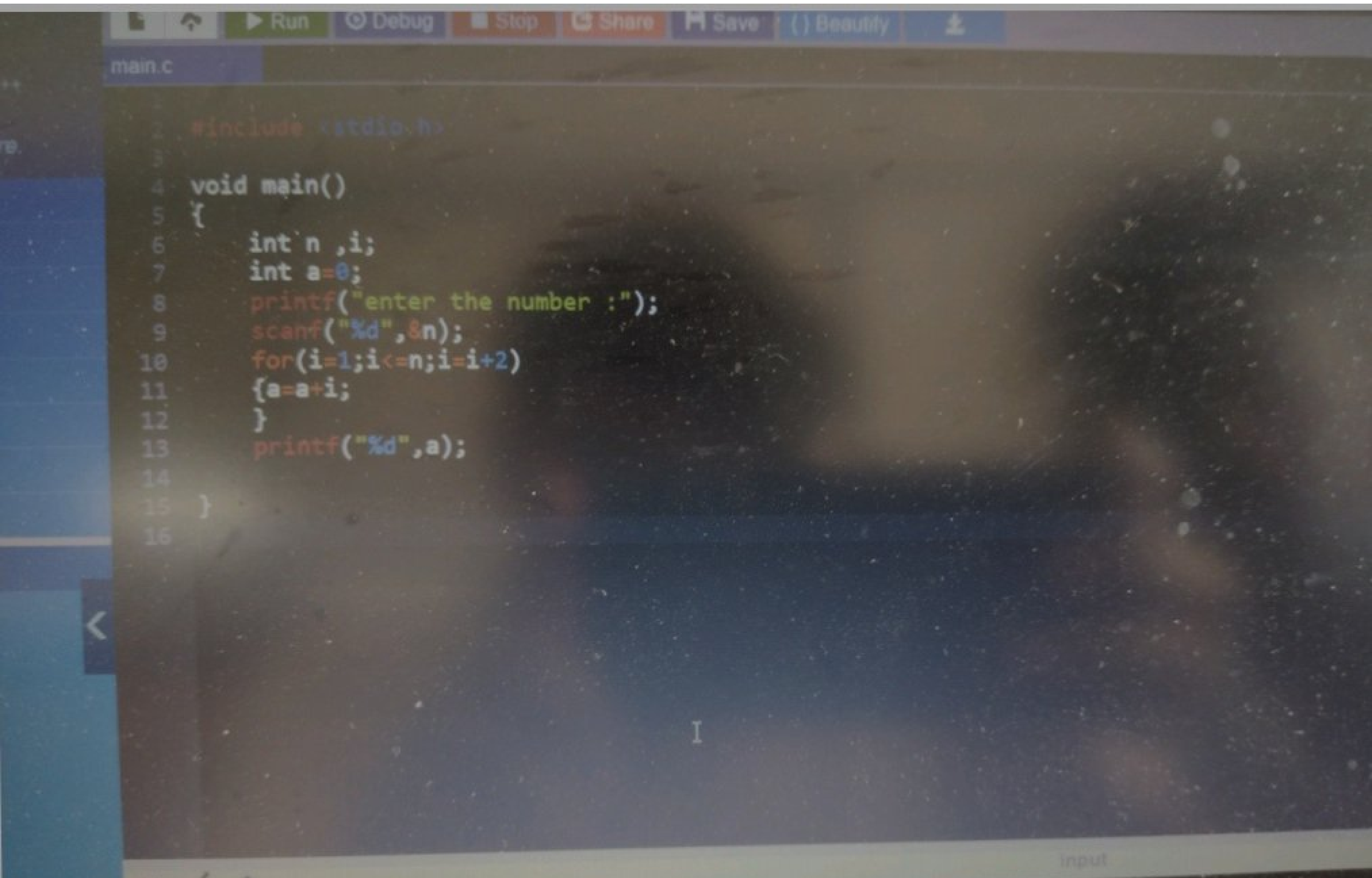
Step 2 - Declare int variable

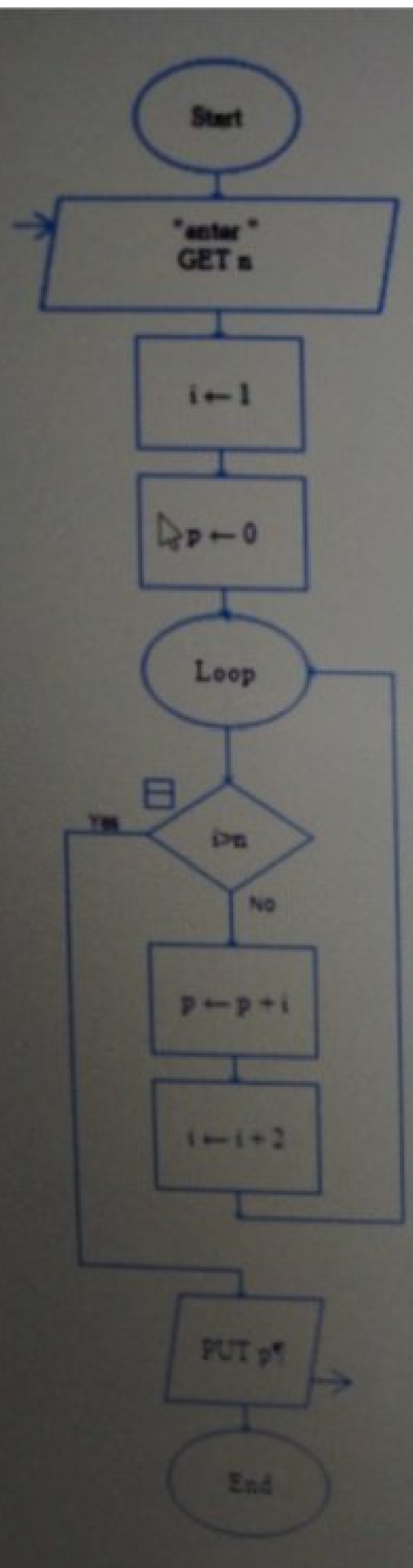
Step 3 - Start a loop that iterats From 2 ton

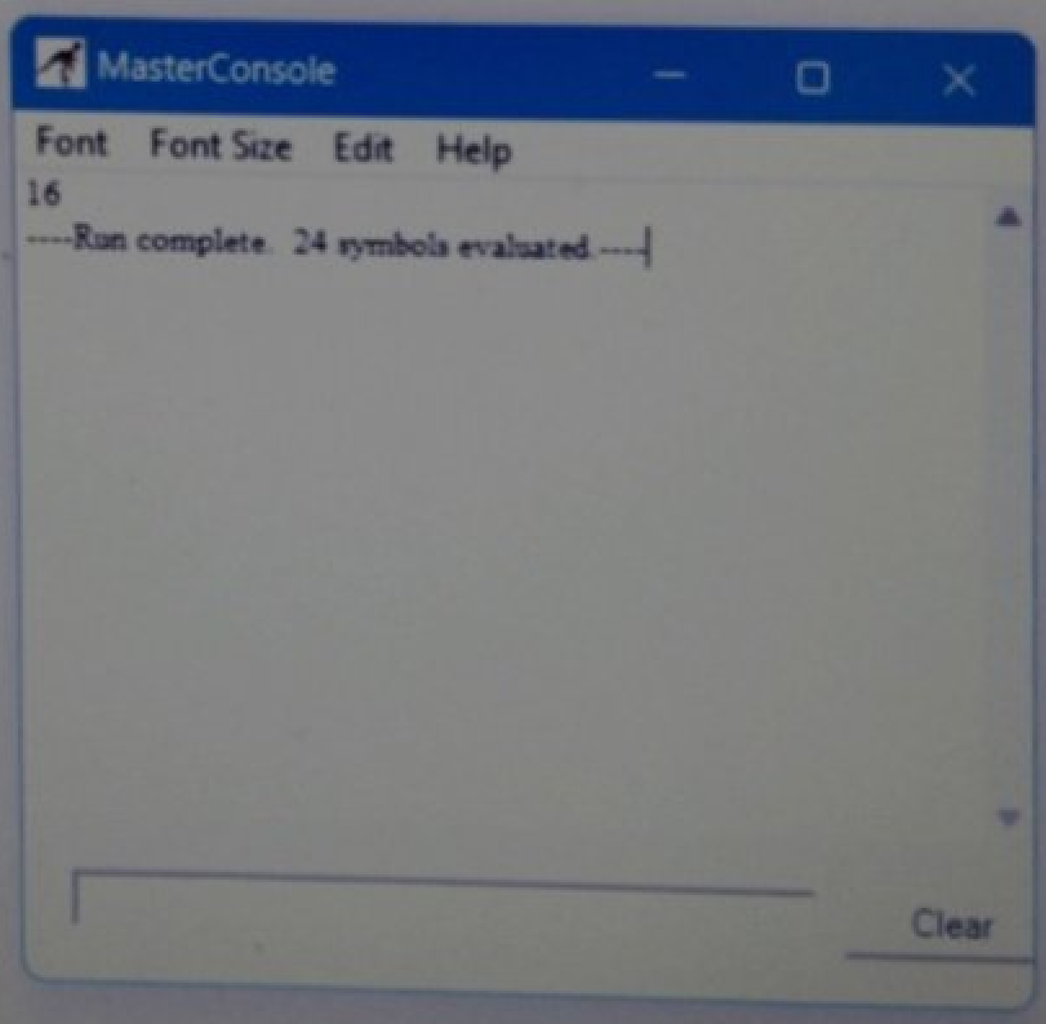
Step 4 - In each iteration of the loop check current value of is Testing when i/2=0

Step 5 - print the value

Step 6 - END







step 3 - start a loop the fact's from 1 tom

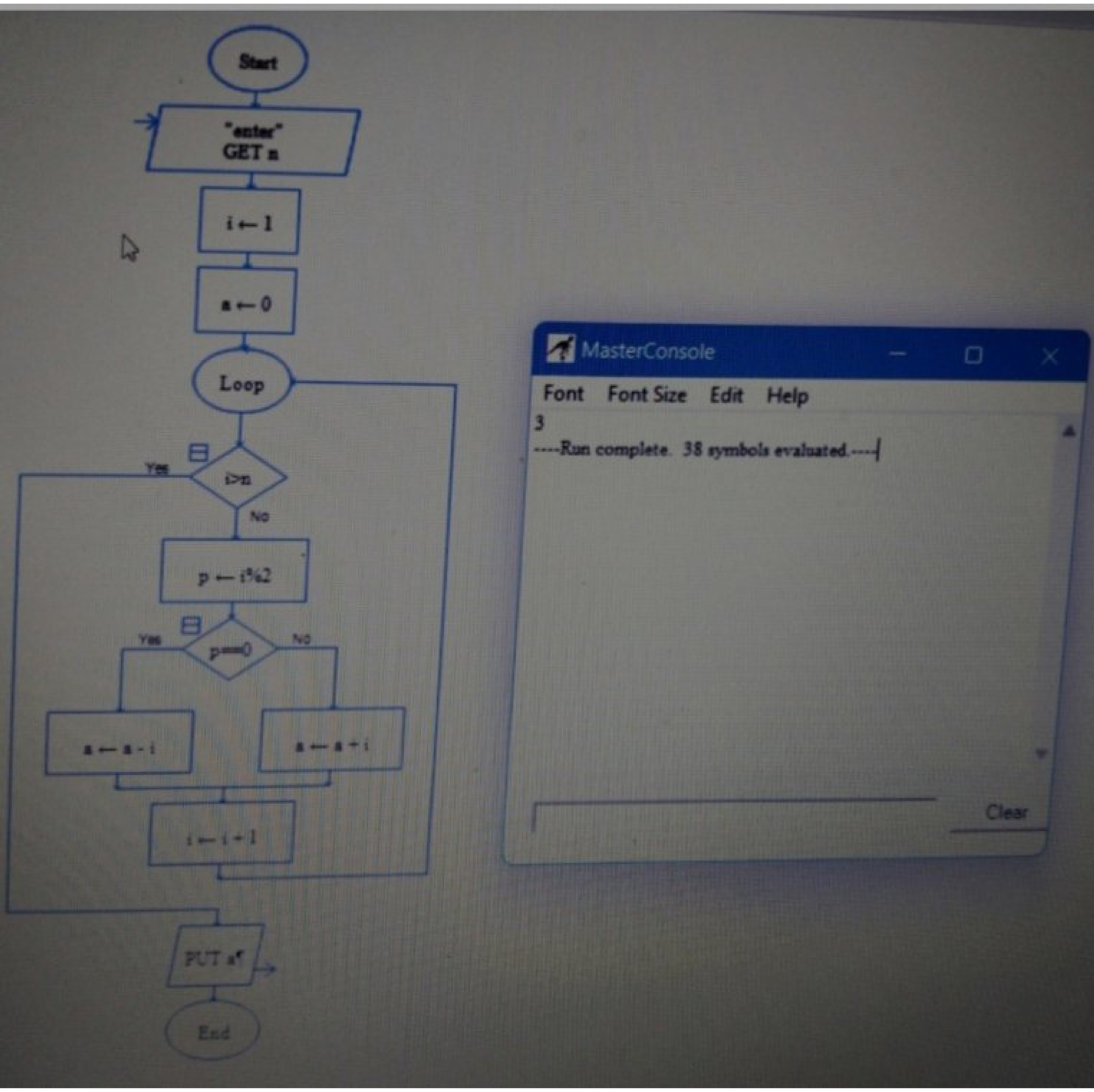
step 4 - Try each iteration of the loop, check if the variable.

step 5 - print the value

step 6 - end

```c
#include <stdio.h>

void main()
{
    int n ,i,p;
    int a=0;
    printf("enter the number :");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
        p=i%2;
        if(p==0){
        a=a-i;}
        else{
            a=a+i;
        }

    }
    printf("%d",a);

}
```

```
enter the number :5
3

...Program finished with exit code 0
Press ENTER to exit console.
```



8) Step 1 - Begin

Step 2 - Declare int variable

Step 3 : Start a loop that iterate from 1 tom

Step 4 : Multiply by -1 to alternate the sign every to other sum.

Step 5 : Print the numbers

Step6 : END

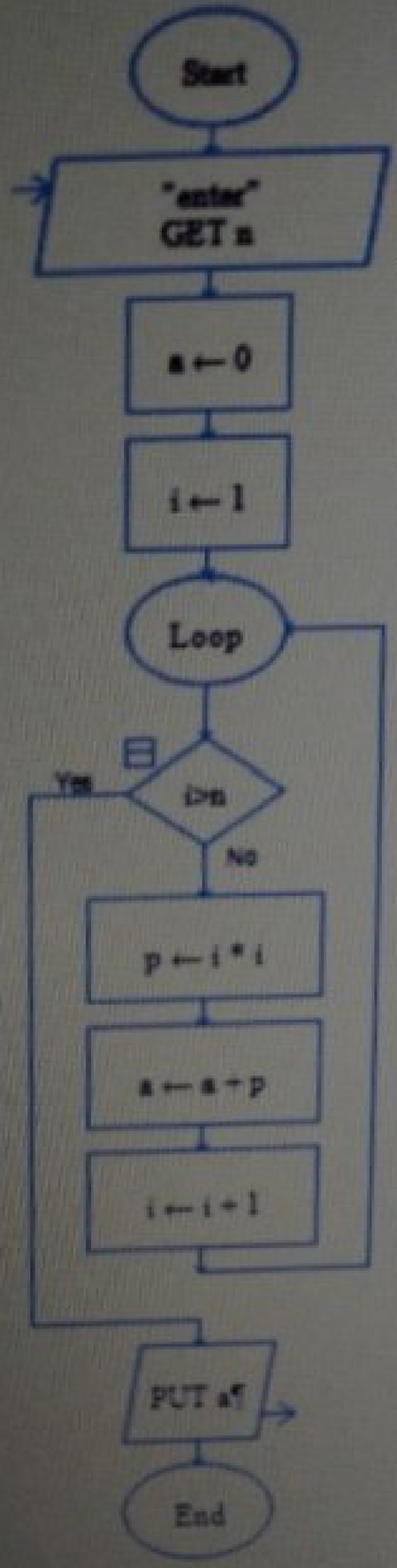
Run Debug Stop Share Save { } Beautify

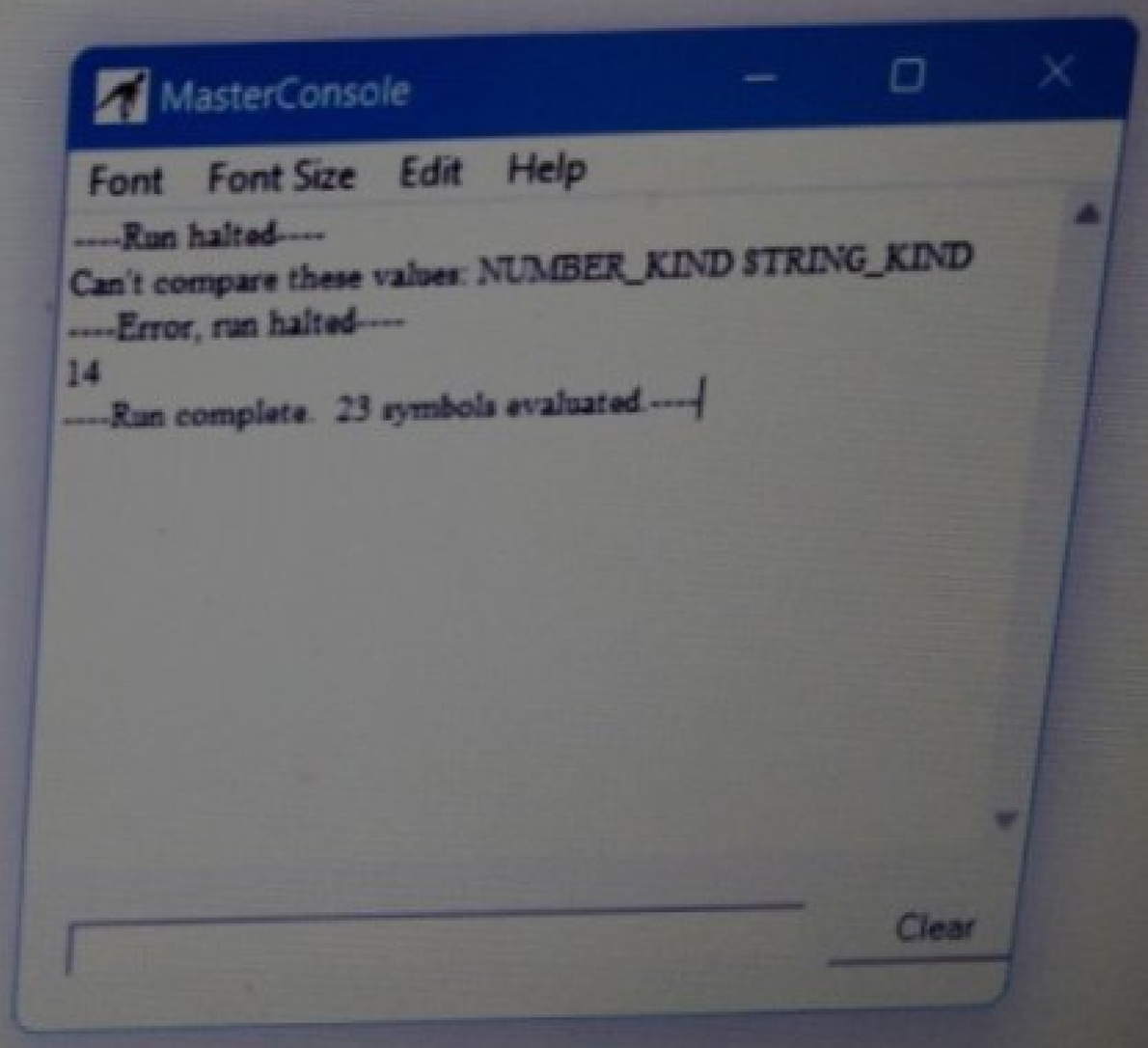
main.c

```c

#include <stdio.h>

void main()
{
    int n ,i,p;
    int a=0;
    printf("enter the number :");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
        p=i*i;
       a=a+p;
    }
    printf("%d",a);

}

```

input

```
enter the number :3
14

...Program finished with exit code 0
Press ENTER to exit console.
```





9) step 1 - Begin

step 2 - Declare the variable sum = itol

step 3 - start a loop that continues while

2 is less than (or) equal to 'n"

step 4 :- with the loop a add 2 to sum.

step 5 :- print the Numbers

step 6 :- END

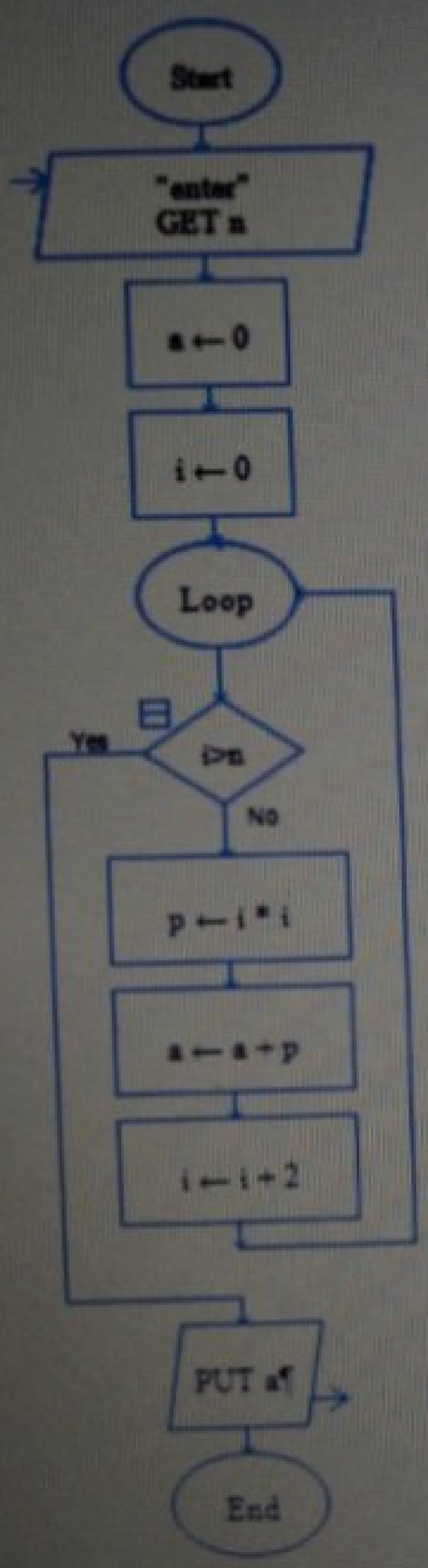
Run | Debug | Stop | Share | Save | { } Beautify

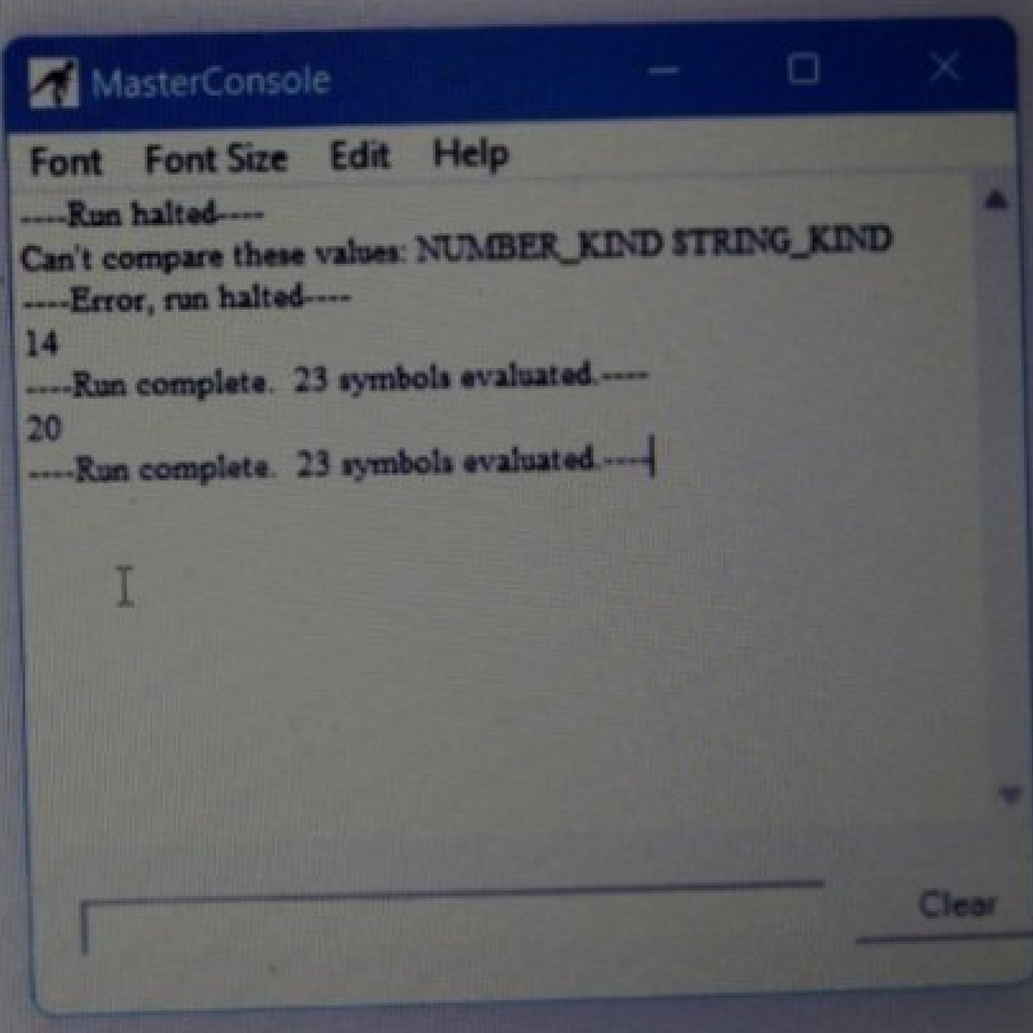
main.c

```c

#include <stdio.h>

void main()
{
    int n ,i,p;
    int a=0;
    printf("enter the number :");
    scanf("%d",&n);
    for(i=0;i<=n;i=i+2)
    {
        p=i*i;
       a=a+p;
    }
    printf("%d",a);

}

```

input

```
enter the number :3
4

...Program finished with exit code 0
Press ENTER to exit console.
```





(a) Step 1 : Begin

Step 2 : Initialize available sum too

Step 3 : loop through all even numbers starting from 2 upto n.

Step 4 : For each even number square to get the next term.

Step 5 : Return the sum variable as the final answer.

Step 6 : Print the Numbers

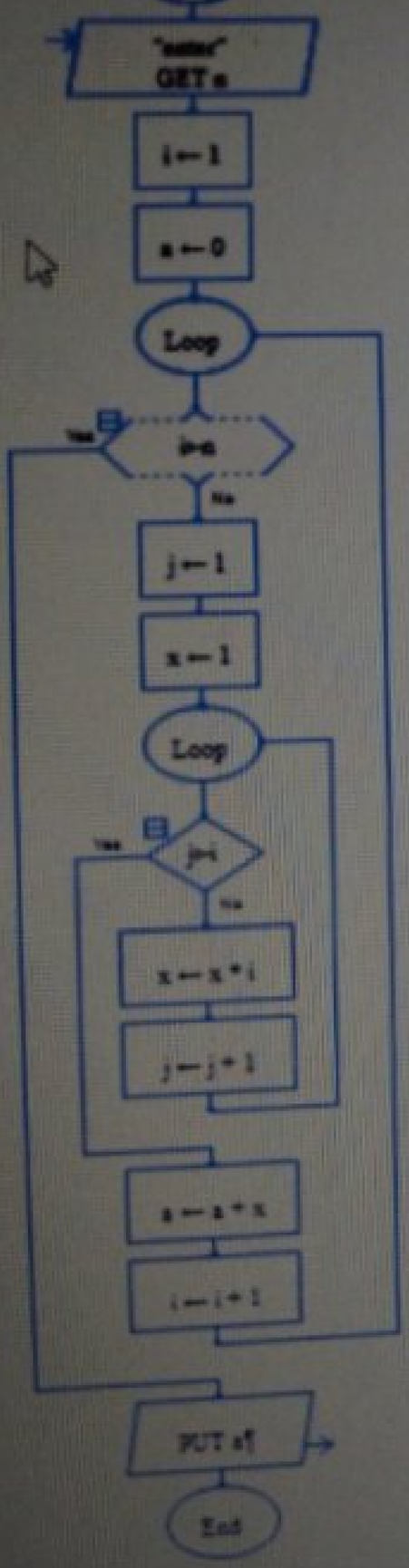
Step 7 : End

main.c

```c

#include <stdio.h>

void main()
{
    int n,a=0;
    printf("enter the number :");
    scanf("%d",&n);
    for(int i=1;i<=n;i++)
    {int x=1;
    for (int j=1;j<=i;j++)
    {
        x=x*i;
    }
    a=a+x;
    }
    printf("%d",a);


}
```

input

```
enter the number :3
32

...Program finished with exit code 0
Press ENTER to exit console.
```



MasterConsole

Font Font Size Edit Help

```
4
3
9
27
----Run complete.  61 symbols evaluated----
1
5
32
----Run complete.  58 symbols evaluated----
1
5
32
----Run complete.  58 symbols evaluated----
32
----Run complete.  56 symbols evaluated----
```

Clear

Step 1 - Begin

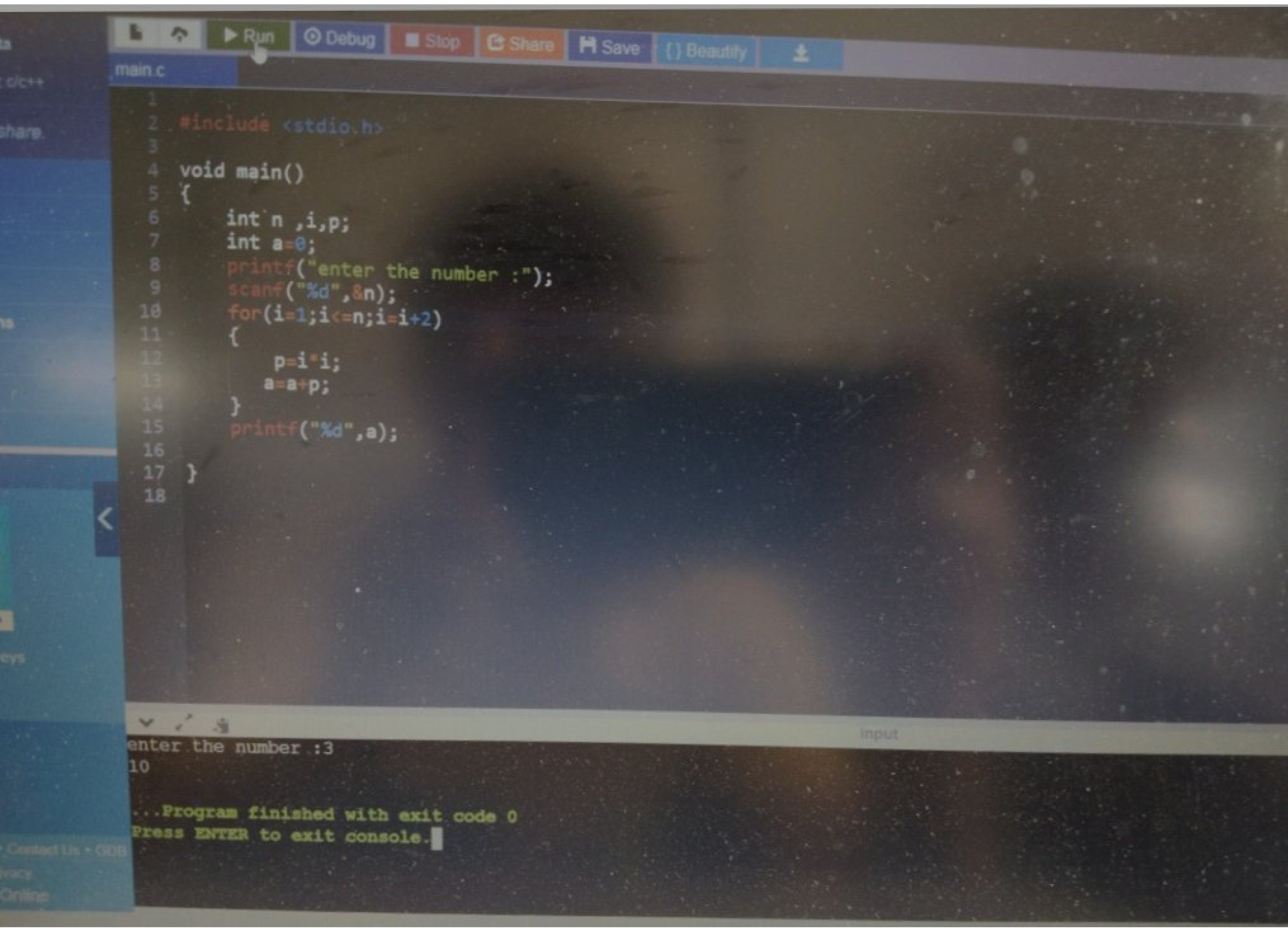
Step 2 - declare into variable

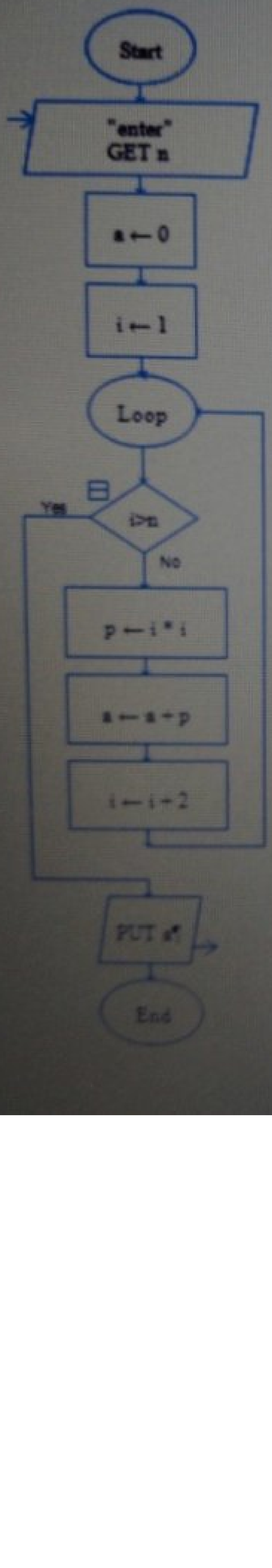
Step 3 - Read value

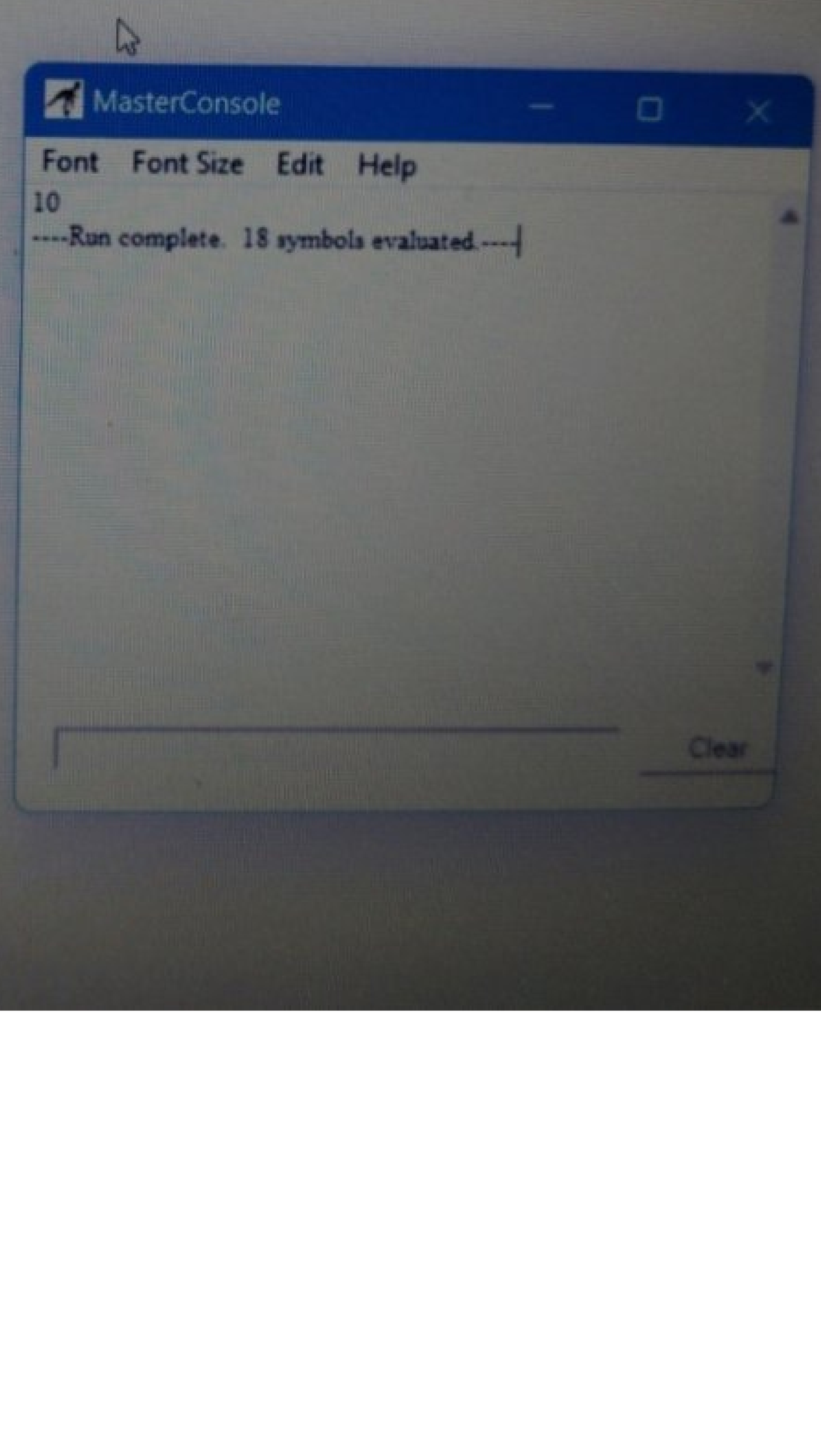
step 4 - condition (i=1; i<=a, i++)

Step 5 - print the variable

step 6 - end







step 1 - begin

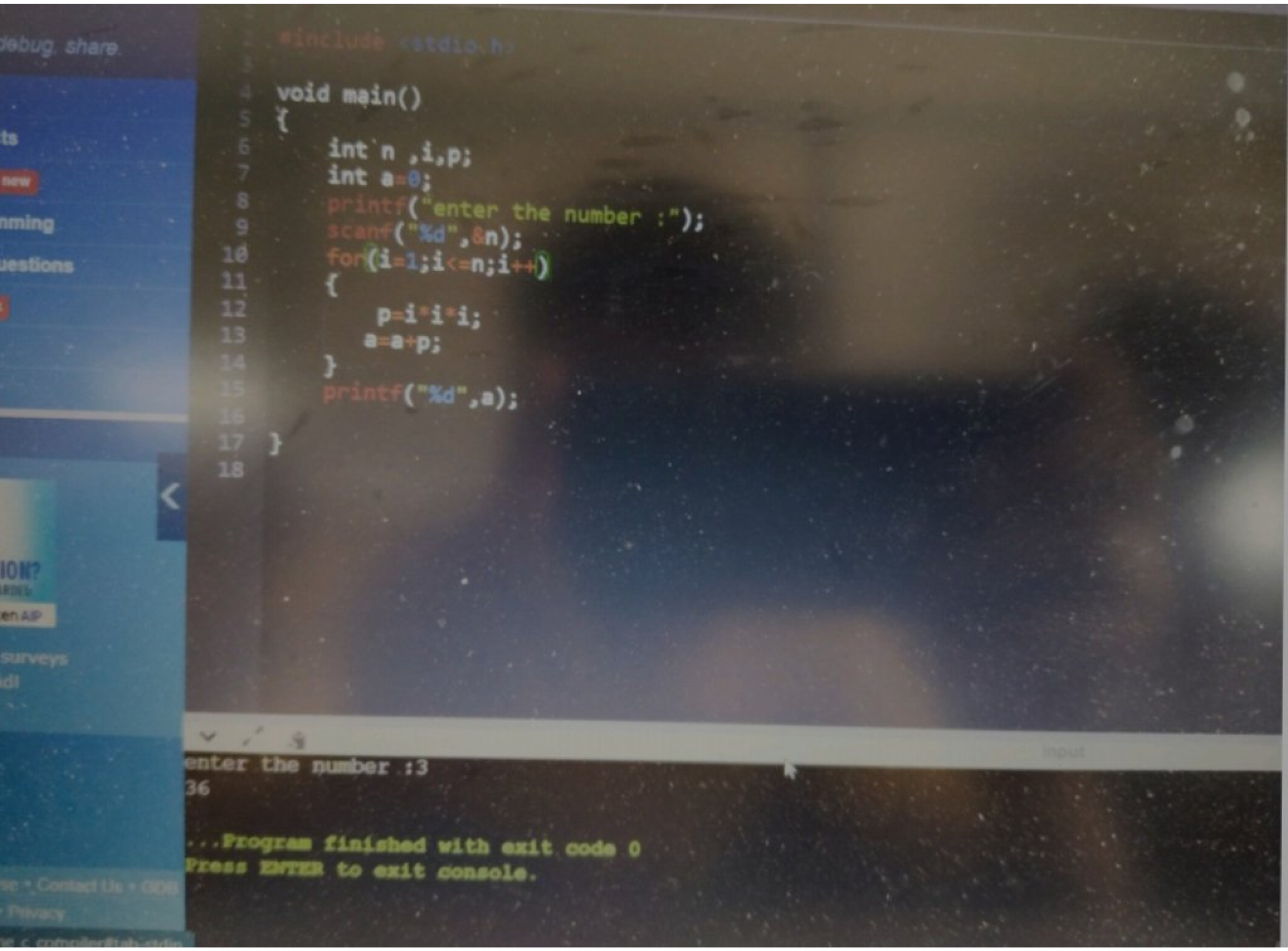
step 2 - declare into variable

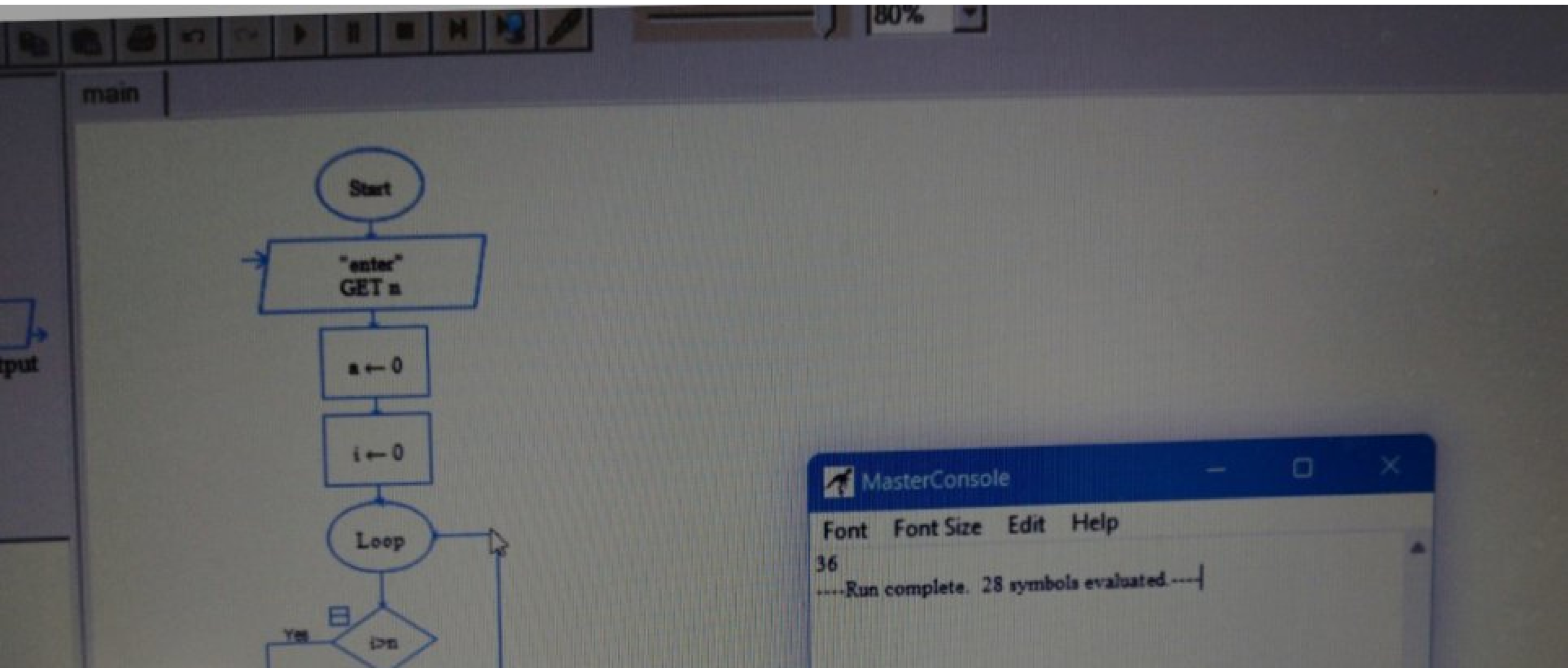
step 3 - Read value

step 4 - condition (i.1.2 ==0)

step 5 - print the variable

step 6 - end





step 1 - begin

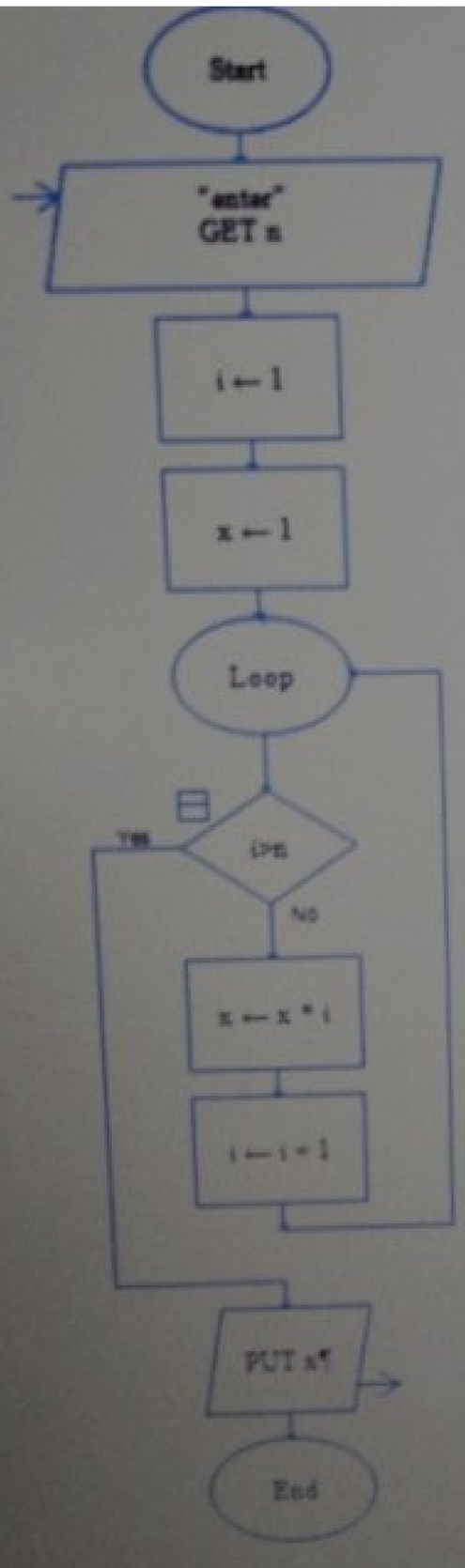
step 2 - declare into variable

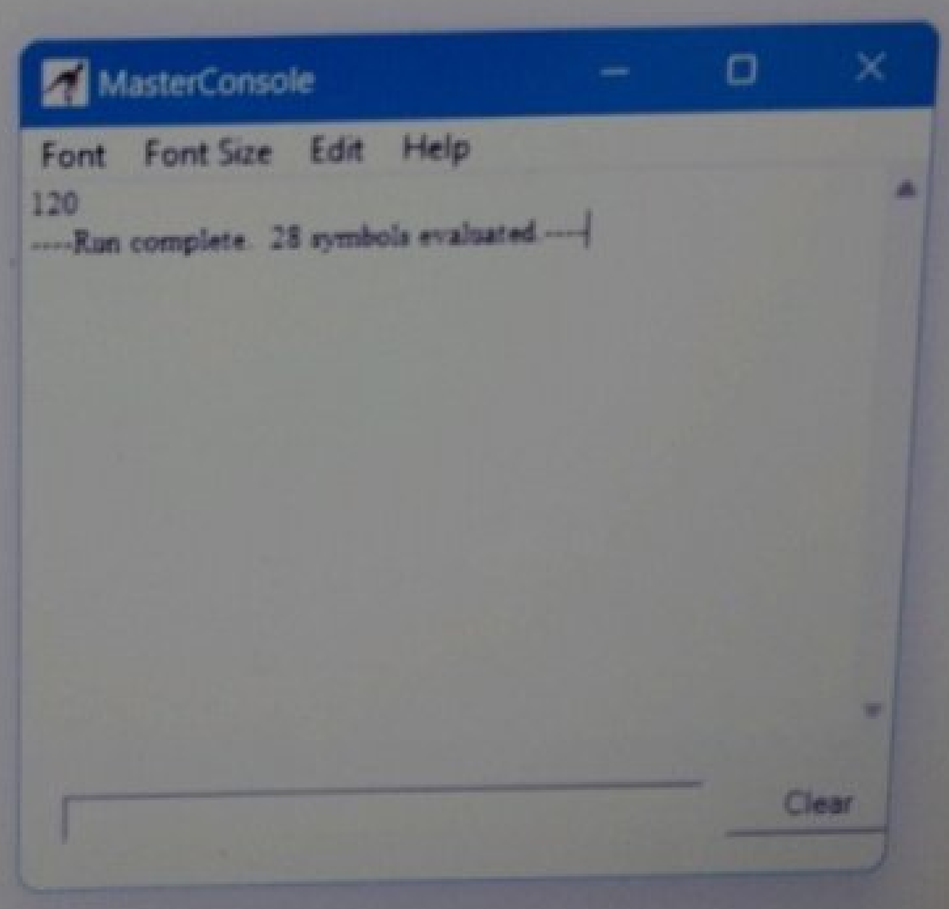
step 3 - Read value

step 4 - condition (i.1.2 ==0)

step 5 - print the value

step6 - END





Step 1 - begin

Step 2 - Declare the variable

Step 3 - Start a loop that if from 1 ton

Step 4 - Read the variable

Step 5 - print the values

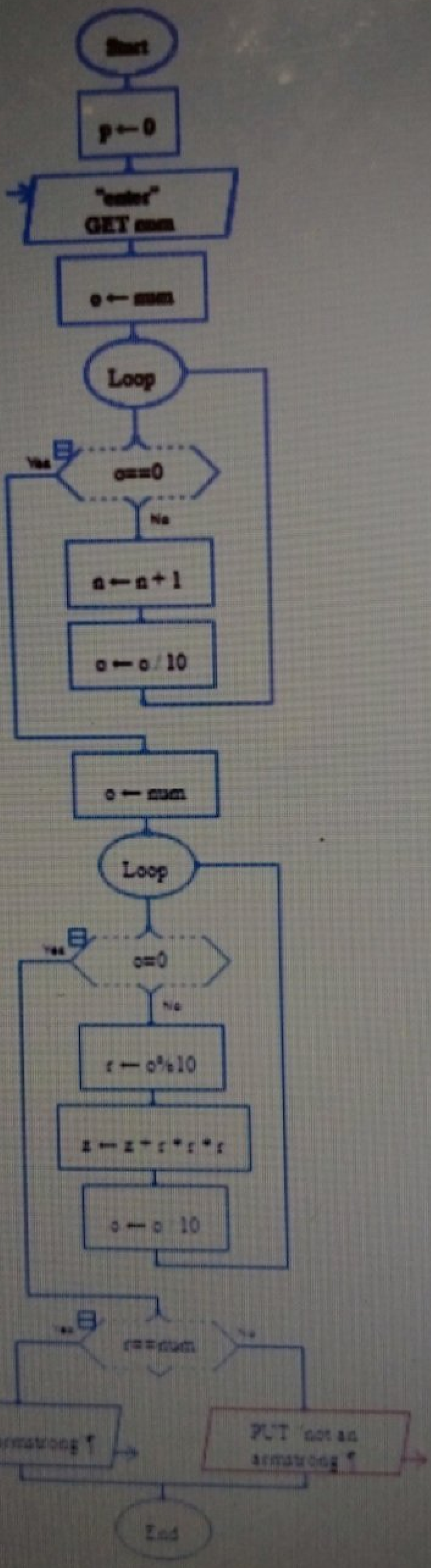
Step 6 - END

main.c

```c
#include <math.h>
#include <stdio.h>
int main() {
    int num, originalNum, remainder, n = 0;
    float result = 0.0;

    printf("Enter an integer: ");
    scanf("%d", &num);

    originalNum = num;
    for (originalNum = num; originalNum != 0; ++n) {
        originalNum /= 10;
    }
     for (originalNum = num; originalNum != 0; originalNum /= 10) {
        remainder = originalNum % 10;
       result += pow(remainder, n);
    }
    if ((int)result == num)
     printf("%d is an Armstrong number.", num);
    else
     printf("%d is not an Armstrong number.", num);
    return 0;
}
```

Input

```
Enter an integer: 4561
4561 is not an Armstrong number.

...Program finished with exit code 0
Press ENTER to exit console.
```



step 1 - Begin

step 2 - declare im the variable

step 3 - start a loop that from 1 tom

step 4 - Each

step 5 - print the values

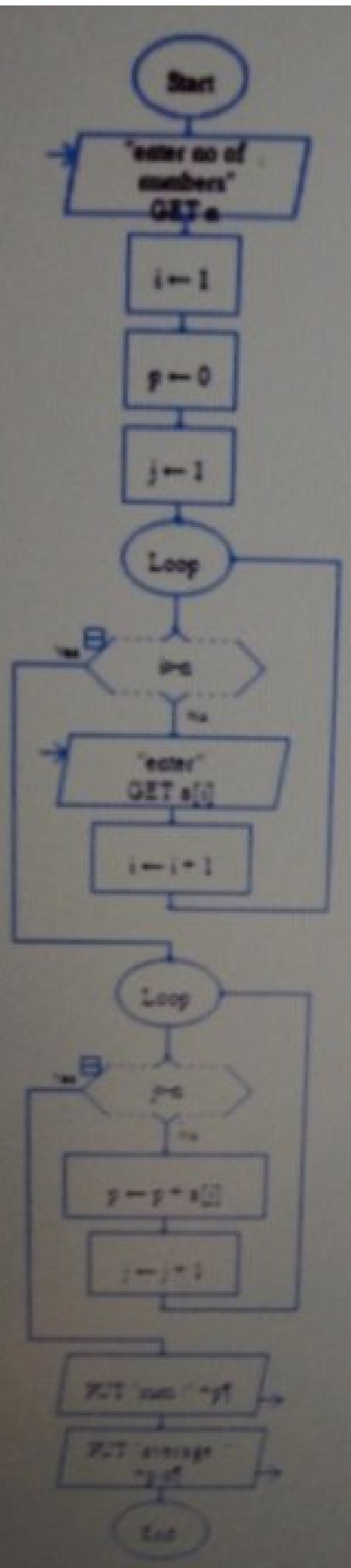
step 6 - END

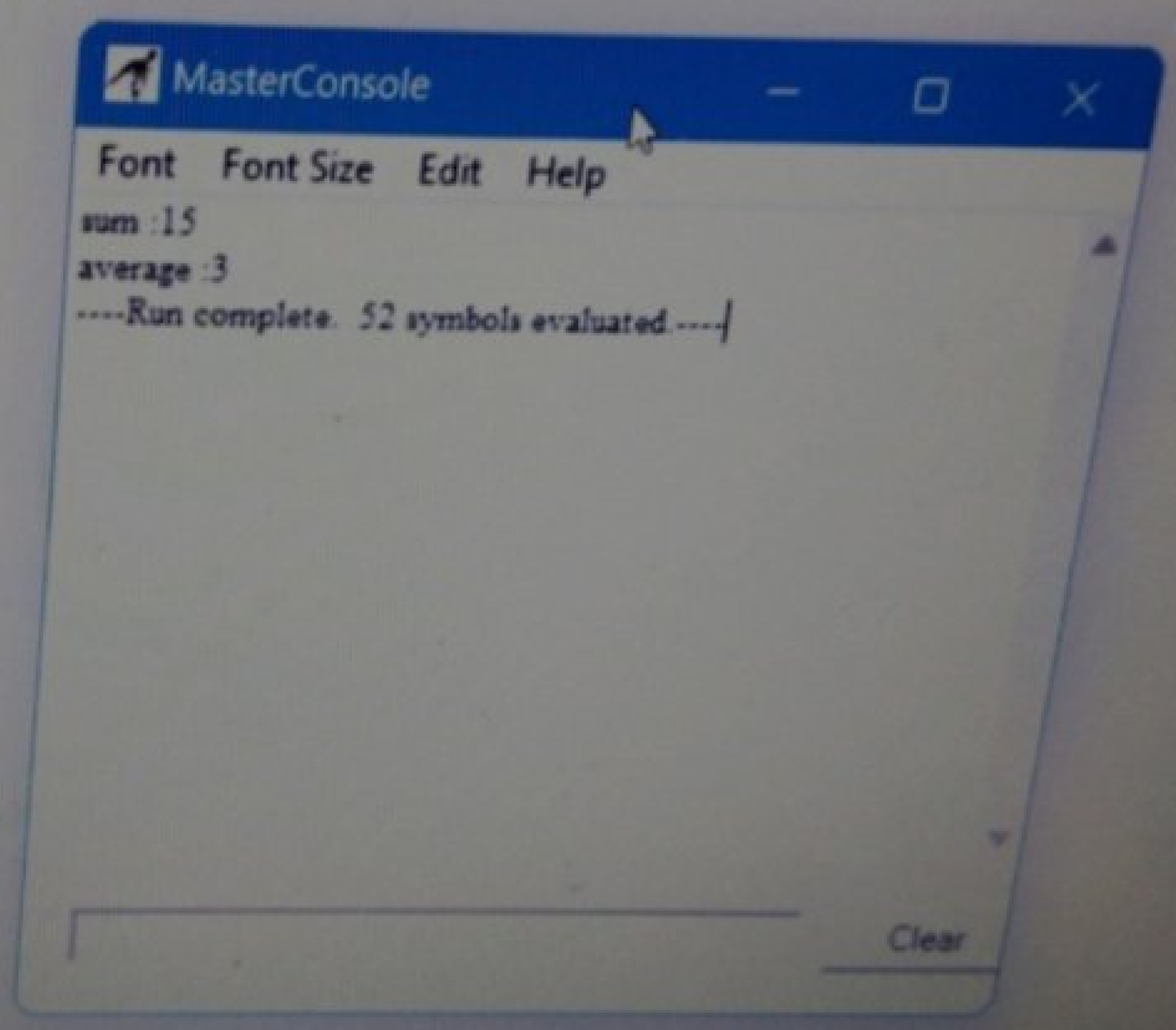
main.c

```c

#include <stdio.h>

void main()
{
    int n,p=0,avg;

    printf("enter no of numbers ::");
    scanf("%d",&n);
    int a[n];
    for (int i=0;i<n;i++)
    {
        scanf("%d",&a[i]);
    }
    for(int j=0;j<n;j++)
    {
        p=p+a[j];
    }
    printf("sum of numbers is %d",p);
    printf("\n average :: %d",p/n);

}
```

input

```
enter no of numbers ::5
1
2
3
4
5
sum of numbers is 15
 average :: 3
```





Step 1 - Begin

Step 2 - Declare int variable

Step 3 - Start a loop that iterats from 2 ton

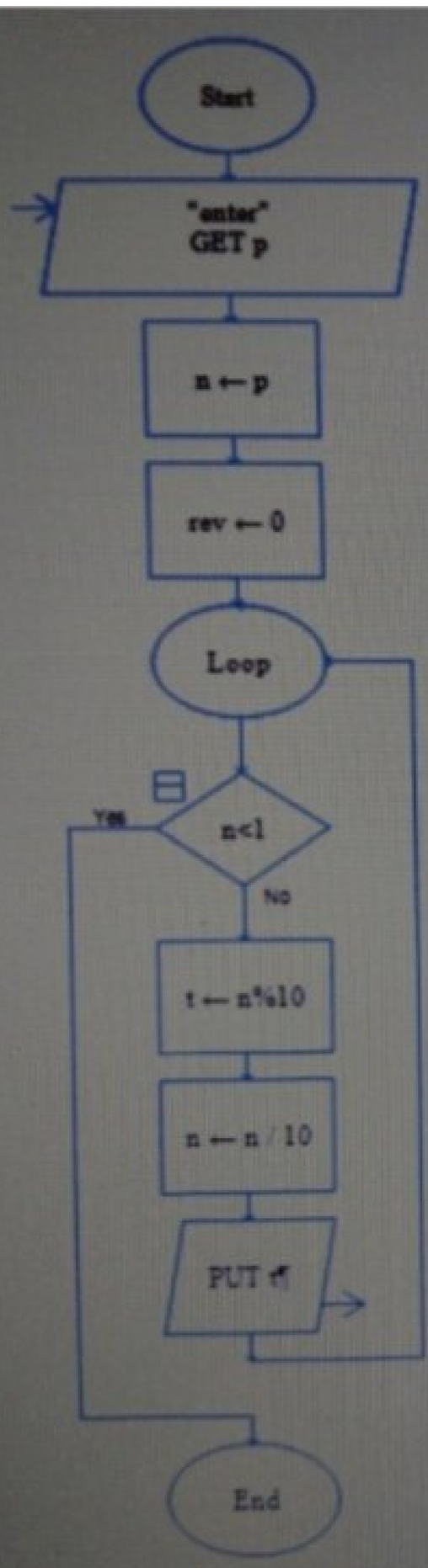
Step 4 - In each iteration of the loop check current value of is Testing when i/2 x

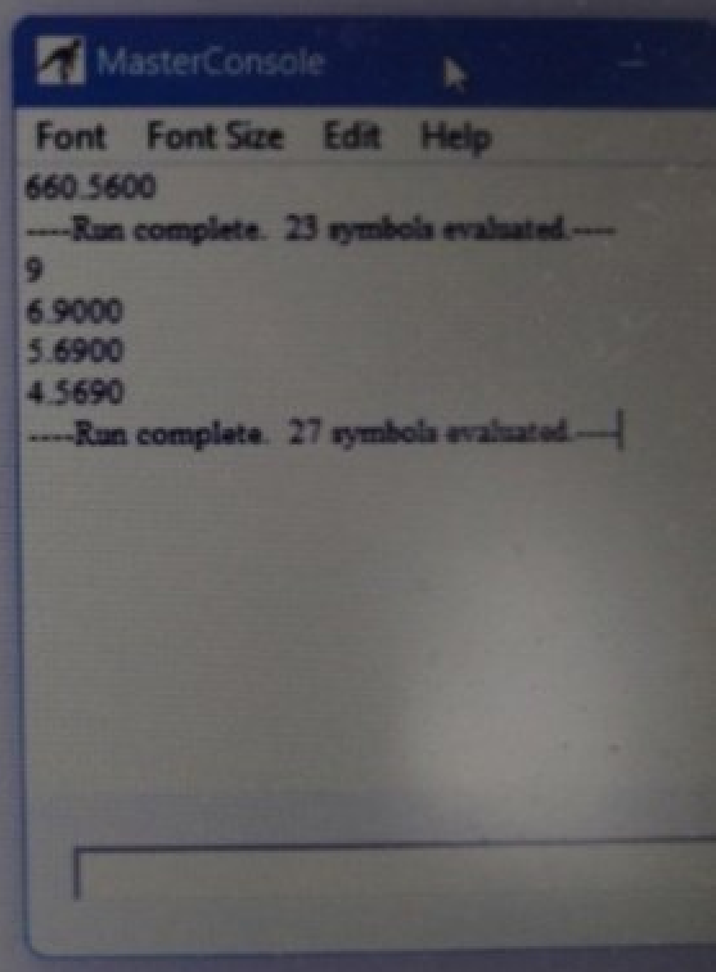
Step 5 - print the value

Step 6 - END

```c
#include <stdio.h>

void main()
{
    int n,rem,rev=0;
    printf("enter the number :");
    scanf("%d",&n);
    printf("digits of the nnumbers are :");
    for(int i=0;n>1;i++){
        rem=n%10;
        n=n/10;
        printf(" %d",rem);
    }

}
```

```
enter the number :456
digits of the nnumbers are : 6 5 4

...Program finished with exit code 0
Press ENTER to exit console.
```





step 3 - start a loop the fact's from 1 tom

step 4 - Try each iteration of the loop, checks if the variable

step 5 - print the value

step 6 - end

```c

#include <stdio.h>

void main()
{
    int n,rem,rev=0;
    printf("enter the number :");
    scanf("%d",&n);
    for(int i=0;n>1;i++){
        rem=n%10;
        n=n/10;
        rev=rev+rem;
    }
    printf("sum of its digits = %d",rev);
}

```

```
enter the number :456
sum of its digits = 15

...Program finished with exit code 0
Press ENTER to exit console.
```

Assignment

Call

Input Output

Selection

Loop

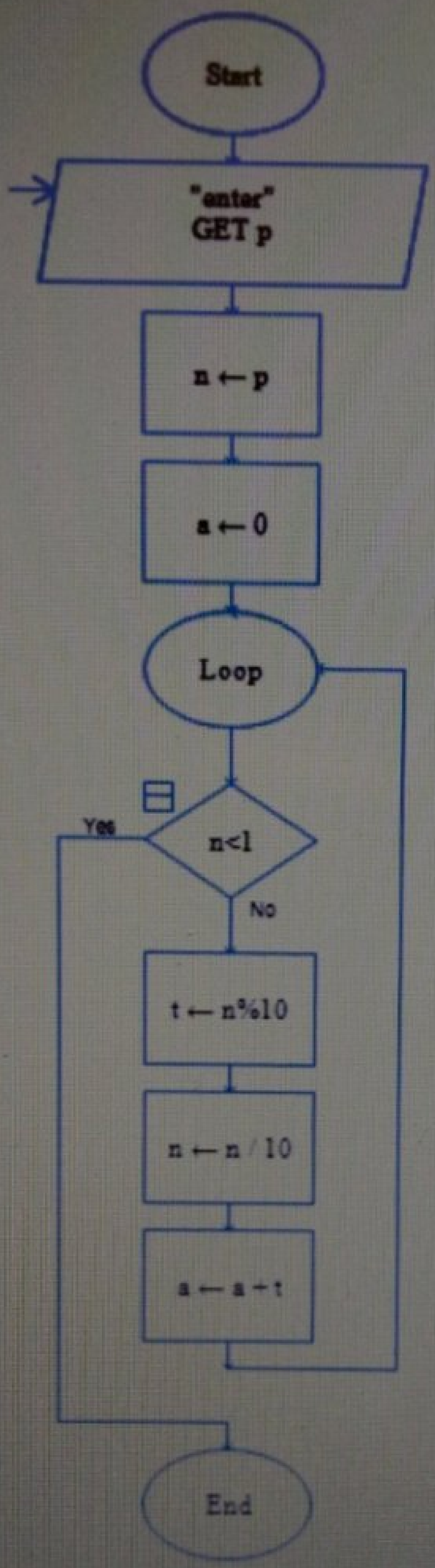
n: 0.4560

p: 456

rev: 660.5600

t 4.5600

main



Search

Step 1 - Begin

step 2 - Declare int variable

step 3 : Start a loop that iterate from 1 ton

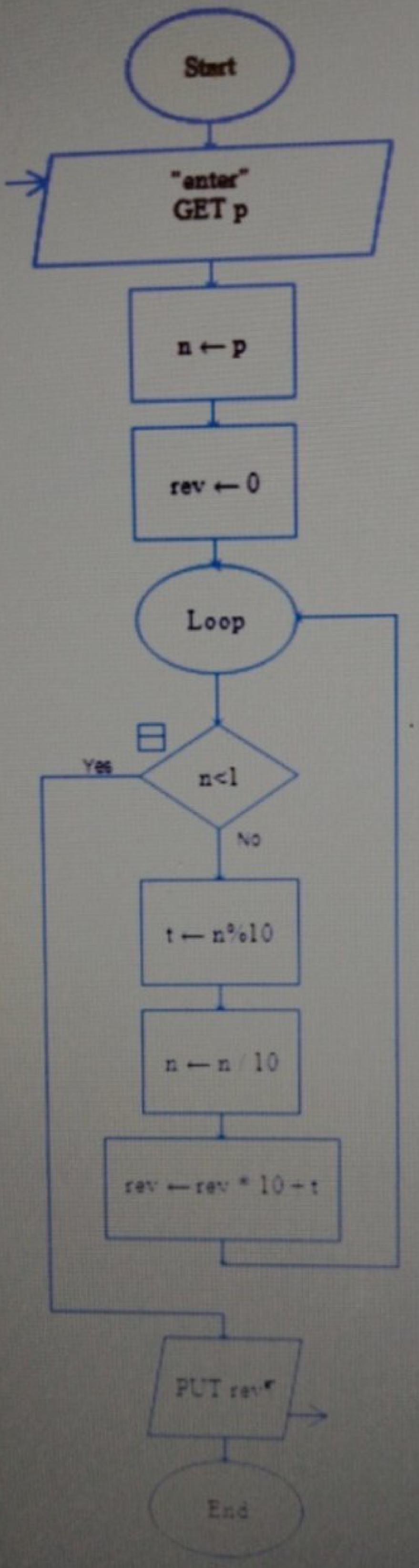
step 4 : Multiply by -1 to alternate the sign every to other sum.

Step 5 : Print the numbers

step6 : END

```c
#include <stdio.h>

void main()
{
    int n,rem,rev=0;
    printf("enter the number :");
    scanf("%d",&n);
    printf("reverse number is :");
    for(int i=0;n>1;i++){
        rem=n%10;
        n=n/10;
        printf("%d",rem);
    }

}
```

```
enter the number :1235564
reverse number is :465532

...Program finished with exit code 0
Press ENTER to exit console.
```



step 1 - Begin

step 2 - declare the variable sum = itol

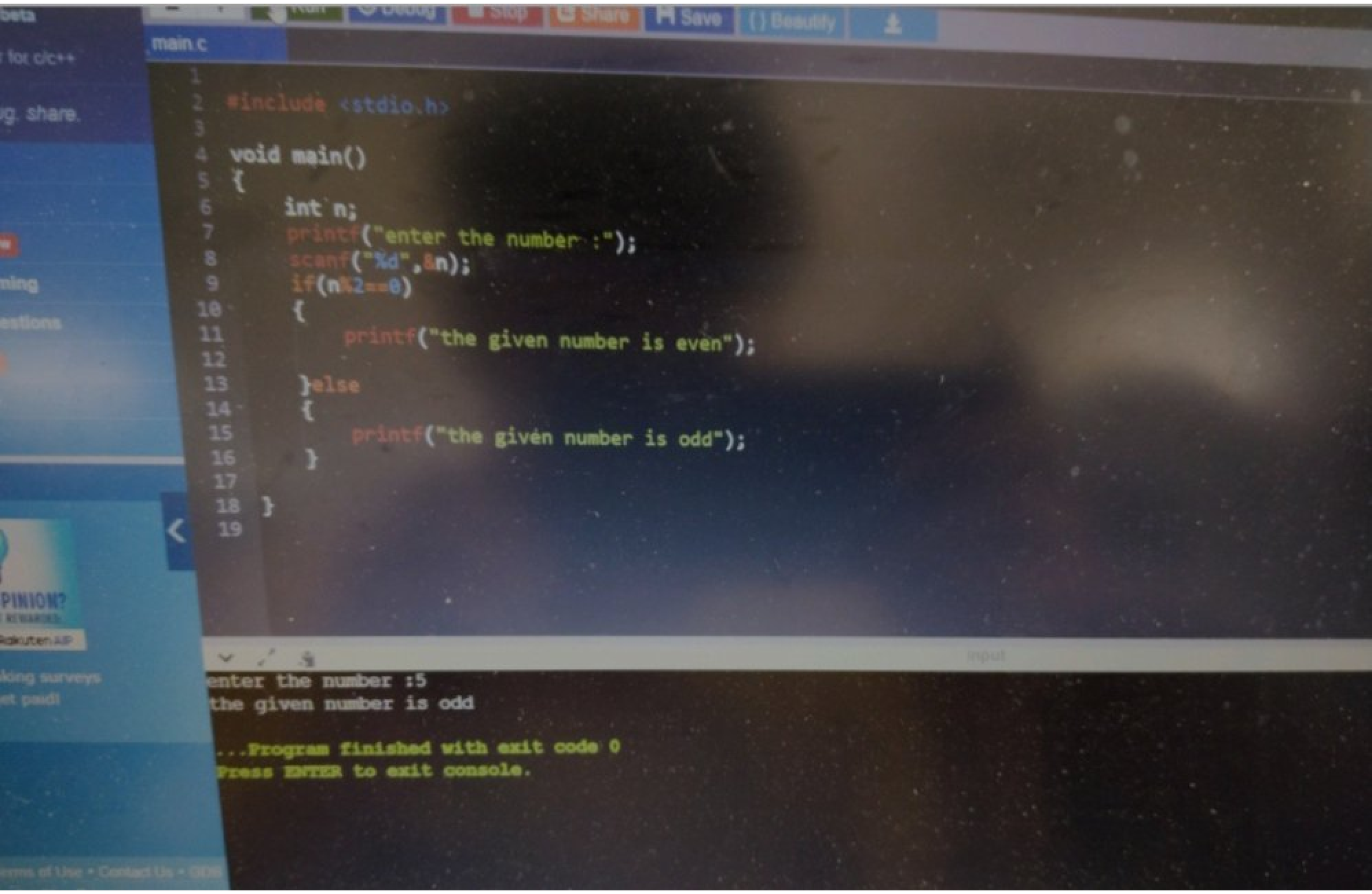
step 3 - start a loop that continues while

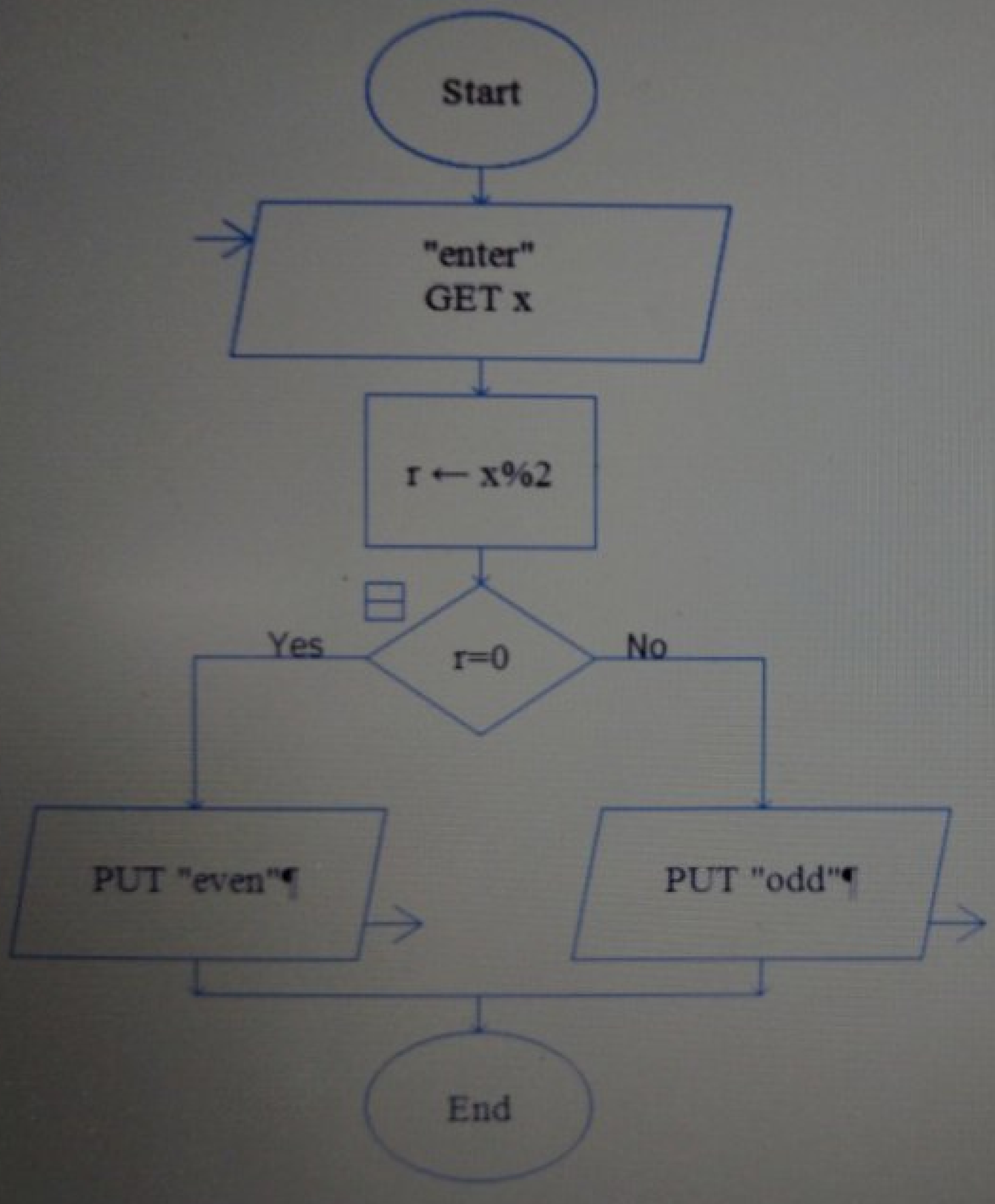
2 is less than (or) equal to 'n'

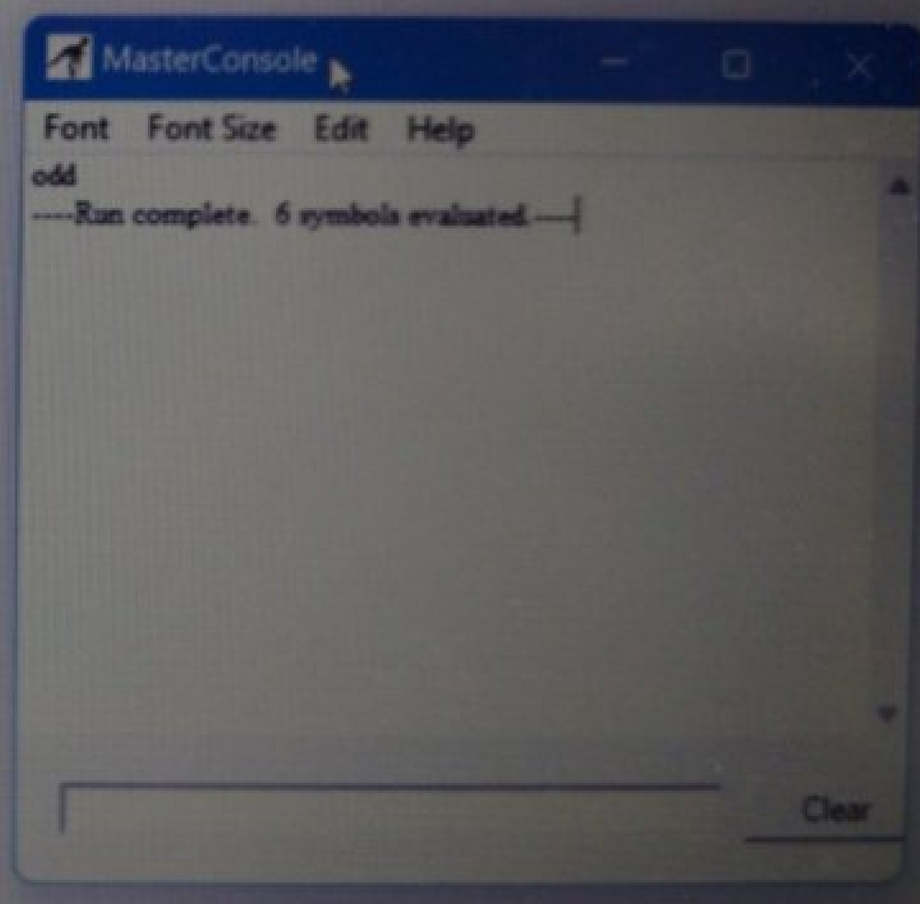
step 4 :- with the loop a add 2 to sum.

step 5 :- print the Numbers

step 6 :- END







) Step 1 : Begin

Step 2 : Initialize available sum: to 0

Step 3 : loop through all even numbers starting from 2 upto n.

Step 4 : For each even number square to get the next term.

Step 5 : Return the sum variable as the final answer.

Step 6 : Print the Numbers

tep 7 : E