DAY 13-14

1 .Write a program in C to display a sum of even numbers up to N with while and do while loop. Take N from the user. If user gives 10 as input then sum=2+4+6+8+10.

#include<stdio.h>

#include<conio.h>

void main()

{

int i=0,n,sum=0;

clrscr();

printf("\n\n\t Enter Number => ");

scanf("%d",&n);

i=0; /\*

while(i<=n)

{

sum = sum + i;

i+=2;

}

\*/

do

{

sum = sum + i;

i+=2;

}while(i<=n);

printf("\n\n\t sum of even number is => %d ",sum);

getch();

}

OUTPUT :

Enter Number => 10

0 + 2 + 4 + 6 + 8 + 10 +

sum of even number is => 30

2. Find out the sum of the following series:

1+2+3+……+n . Take n as input from the user.

#include<stdio.h>

#include<conio.h>

void main()

{

int i=0,n,sum=0;

clrscr();

printf("\n\n\t Enter Number => ");

scanf("%d",&n);

i=0;

while(i<=n)

{

sum = sum + i;

printf(" %d +",i);

i++;

}

printf("\n\n\t sum of is => %d ",sum);

getch();

}

OUTPUT:  
 Enter Number => 10

0 + 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 +

sum of even number is => 55

3. Find out the sum of the following series :

12 +22 +32 +42 ….. up to nth terms . If user enters n=5 then it will do the sum of 12 +22 +32 +42+52 .

#include<stdio.h>

#include<conio.h>

void main()

{

int i,sum=0,n;

clrscr();

printf("\n\n\t Enter Number =>");

scanf("%d",&n);

for(i=12; i<=n; i++)

{

sum = sum + i;

printf(" %d +",i);

i += 9;

}

printf("\n\n\t sum is %d",sum);

getch();

}

OUTPUT :

Enter Number =>55

12 + 22 + 32 + 42 + 52 +

sum is 160

4. Write a program in C to print all the numbers and sum of all the integers that are greater than 100 and

less than 200 and are divisible by 7. Modify the above program so that it takes starting and ending limits

from the user.

5. Write a C program to design the following pattern:

1

1 4

1 4 9

1 4 9 16

1 4 9 16 25

#include<stdio.h>

#include<conio.h>

void main()

{

int i,n,j,k=0;

clrscr();

printf("\n\n\t Enter number =>");

scanf("%d",&n);

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

{

for(j=1; j<=i; j++)

{

printf("%d ",j\*j);

}

printf("\n");

}

getch();

}

OUTPUT:

1

1 4

1 4 9

1 4 9 16

1 4 9 16 25