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**Practical – 4: Program to implement Looping Constructs**

1. **Program to display the first N numbers.**

#include<Stdio.h>

#include<conio.h>

void main()

{

void input(int n);

int n;

input(n);

}

void input(int n1)

{

int i;

printf("Enter n number:\n");

scanf("%d",&n1);

for(i=1;i<=n1;i++)

{

printf("%d ",i);

}

}

1. **Program to print the sum of all numbers up to a given number.**

#include<Stdio.h>

#include<conio.h>

void main()

{

void input(int n);

int n;

input(n);

}

void input(int n1)

{

int i;

int s;

s=0;

printf("Enter n number:\n");

scanf("%d",&n1);

for(i=1;i<=n1;i++)

{

printf("%d ",i);

s=s+i;

}

printf("\nSum is %d",s);

}

1. **Program to find the factorial of a given number.**

**#include<stdio.h>**

**#include<conio.h>**

**void main()**

**{**

**int fact(int k);**

**int n,k;**

**printf("Enter a number:");**

**scanf("%d",&n);**

**k=fact(n);**

**printf("Factorial of %d is %d",n,k);**

**getch();**

**}**

**int fact(int n)**

**{**

**if(n==0)**

**return 1;**

**else**

**return (n\*fact(n-1));**

**}**

**4. Program to print sum of even and odd numbers from 1 to N numbers.**

**5. Program to print the Fibonacci series.**

**6. Program to check whether the entered number is prime or not.**

**7. Program to find the sum of digits of the entered number.**

**8. Program to find the reverse of a number.**

#include<Stdio.h>

#include<conio.h>

void main()

{

int n,rev=0,remainder;

printf("Enter a number: ");

scanf("%d",&n);

while(n>0)

{

remainder=n%10;

rev=rev\*10+remainder;

n=n/10;

}

printf("Reverse number is %d",rev);

}

**9. Program to print Armstrong numbers between two intervals.**

**10. Write a program to print the pattern**

**1**

**1 2**

**1 2 3**

**1 2 3 4**

**#include<Stdio.h>**

**#include<conio.h>**

**void main()**

**{**

**void pattern(int);**

**int n;**

**printf("Enter a number:\n");**

**scanf("%d",&n);**

**pattern(n);**

**}**

**void pattern(int c)**

**{**

**int i,j;**

**for(i=1;i<=c;i++)**

**{**

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

**{**

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

**}**

**printf("\n");**

**}**

**}**

**11. Write a program in C to display table of number 1 to 10 using nested loop**