## program factorial of number

#include<stdio.h> factorial(5)🡪5\*4\*3\*2\*1

void main()

{ //block means a collection of instructions

int i, no, fact=1; enclosed inside {--}.

printf("Enter the any no. : ");

scanf("%d",&no); syntax scanf()

for(i=1;i<=no;i++) scanf(format specifier, address of a variable )

{ format specifier which specifie the input format

fact=fact\*i; memory--🡪name,address

}

printf("Factorial =%d ",fact); no i fact

} ----------------------------- 153=1+125+27

5 1 1

2 1

3 2

4 6

5 24

6 120

## C Program to reverse any number using while loop

#include<stdio.h>

void main() no🡪 437 result🡪734

{

int no,rev=0,dig,no1;

printf("Enter any num: "); i no no1 rev dig

scanf("%d",&no); ---- ---- ------ ----- ------

no1=no; 437 437 0

while(no>0) 1 43 437 7 7

{ 2 4 437 73 3

dig=no%10; 3 0 437 734 4

rev=rev\*10+dig; 4

no=no/10;

}

printf("Reverse of %d is: %d",no1,rev);

}

## Find number of digits from any numbers

#include<stdio.h>

void main()

{

int no,count=0;

printf("Enter any number: ");

scanf("%d",&no);

while(no>0)

{

no=no/10;

count++;

}

printf("Number of digits in given number is: %d",count);

}

## Print fibonacci series

#include<stdio.h>

void main()

{

int i,no, first=0, second=1, next;

first=0;

second=1;

printf("Enter nubmer of terms for Series: ");

scanf("%d",&no);

printf("Fibonacci series are:\n");

for(i=0; i<no; i++)

{

printf("%d\n",first);

next = first + second;

first = second;

second = next;

}

}

## Armstrong number program in C

#include<stdio.h>

void main()

{

int arm=0,dig,num,temp;

printf("Enter any number: ");

scanf("%d",&num);

temp=num;

while(temp>0)

{

dig =temp%10;

temp=temp/10;

arm=arm+dig\*dig\*dig;

}

if(arm==num)

{

printf("%d is armstrong number",num);

}

else

{

printf("%d is not armstrong number", num);

}

}

## program check palindrome number

#include<stdio.h>

void main()

{

int dig,no,no1,temp=0;

printf("Enter any num: ");

scanf("%d",&no);

no1=no;

for(;no>0;)

{

dig=no%10;

no=no/10;

temp=temp\*10+dig;

}

if(temp==b)

{

printf("Palindrome number");

}

else

{

printf("Not Palindrome number");

}

}

## program to input a no and add all digits.

#include<stdio.h>

void main()

{

int dig,no,sum=0;

printf("Enter any num: ");

scanf("%d",&no);

while(no!=0)

{

dig=no%10;

sum=sum+dig;

no=n0/10;

}

printf(“%d”,sum);

}

## program to input a no to add all the even digits and multiply all the odd digits.

#include<stdio.h>

void main()

{

int dig,no,sum=0,mul=1; 6789 dig-🡪9

printf("Enter any num: "); 678 8

scanf("%d",&no); 67 7

6,0 6

sum🡪0+8=8+6=14

while(no!=0) mul🡪1\*9=9\*7=63

{

dig=no%10;

if(dig%2==0)

{

Sum=sum+dig;

}

else

{

mul=mul\*dig;

}

no=no/10;

}

printf(“%d %d”,sum,mul);

}

## program to input a no and check it is mirror or not.

#include<stdio.h>

void main()

{

int dig,no,rev=0,sq,no1; 441=sqrt(441)=21=12=144=441

printf("Enter any num: ");

scanf("%d",&no);

no1=no;

no=no\*no;

while(no!=0)

{

dig=no%10;

rev=rev\*10+dig;

no=no/10;

}

sq=sqrt(rev);

rev=0;

while(sq!=0)

{

dig=sq%10;

rev=rev\*10+dig;

sq=sq/10;

}

If(rev==no1)

{

printf(“mirror”);

}

else

{

printf(“not mirror”);

}

}

## program to input a no and check it is nelson or not.

#include<stdio.h>

void main()

{ 1111, 222

int no,dg1,dg2; dg1=2

printf("Enter any num: ");

scanf("%d",&no);

dg1=no%10;

no=no/10;

while(no!=0)

{

dg2=no%10;

if(dg1==dg2)

{

no=no/10;

}

else

{

break;

}

}

If(no==0)

{

printf(“nelson”);

}

else

{

printf(“not nelson”);

}

}

## program to input a no and check it is perfect or not.

#include<stdio.h>

void main()

{

int no,sum=0,i=1;

printf("Enter any num: ");

scanf("%d",&no);

while(i<=no)

{

If(no%i==0)

{

sum=sum+i;

}

i++;

}

If(sum==2\*no)

{

printf(“perfect”);

}

else

{

printf(“not perfect”);

}

}

## program the following series.

## i)1+2+3+4+5+……..+n

## ii)1/2!+1/3!+1/4!+…..+1/n!

## iii)1^2+2^2+3^2+…..+n^n