

Program1:-

```
#include<stdio.h>
```

```
main()
```

```
{  
    int x, sum, temp;  
    sum = 0;
```

```
    printf("Enter the Number\n");  
    scanf("%d",&x);
```

```
    temp = x; //temporarily stores the given number
```

```
    while(temp!=0)  
    {  
        sum = sum + (temp%10);  
        temp = temp/10;  
    }
```

```
    printf("The sum of digits of %d is %d",x,sum);  
}
```

Program2:-

```
#include<stdio.h>
```

```
main()
```

```
{  
    int x, rev, temp;  
    rev = 0;
```

```
    printf("Enter the Number\n");  
    scanf("%d",&x);
```

```
    temp = x; //temporarily stores the given number
```

```
    while(temp!=0)  
    {  
        rev = rev + (temp%10);  
        rev = rev*10;  
        temp = temp/10;  
    }
```

```
    rev = rev/10;
```

```
    printf("The sum of digits of %d is %d",x,rev);  
}
```

Program3:-

```
#include<stdio.h>
```

```
main()
```

```
{
```

```

int x, rev, temp;
rev = 0;

printf("Enter the Number\n");
scanf("%d",&x);

temp = x; //temporarily stores the given number

while(temp!=0)
{
    rev = rev + (temp%10);
    rev = rev*10;
    temp = temp/10;
}

rev = rev/10;
if(rev==x)
{
    printf("It is a Palindrome number");
}

else
{
    printf("It is not a Palindrome number");
}
}

```

Program4:-

```
#include<stdio.h>
```

```

main()
{
    int f1 = 0;
    int f2 = 1;
    int f3,res;
    int n,x;

    printf("Enter the nth term of the fibonacci\n");
    scanf("%d",&n);
    x=2;
    if(n>=0)
        printf("%d",f1);

    if(n>=1)
        printf("%d",f2);

    //doing all the main work here
    while(x<n)
    {
        f3 = f2;
        res = f2 + f1;
        f2 = res;
    }
}

```

```
f1 = f3;
if(x<(n-1))
{
printf("%d",res);
}
else
{
printf("%d....",res);
}

x++;
}
}
```

Program5:-

```
#include<stdio.h>
```

```
main()
{
int n, x, count=0;

printf("Enter the Number\n");
scanf("%d",&n);
x=1;
```

```
while(x<=n)
{
if((n%x)==0)
{
count++;
}
x++;
}
```

```
if(count==2)
{
printf("It is a Prime number");
}
```

```
else
{
printf("It is not a Prime number");
}
```

```
}
```

Program6:-

```
#include<stdio.h>
```

```
main()
{
```

```

int x, sum, temp,c;
sum = 0;

printf("Enter the Number\n");
scanf("%d",&x);

temp = x;

while(temp!=0)
{
    c = temp%10;
    sum = sum + (c*c*c); //sum + cube of the extracted digit
    temp /= 10;
}

if(sum==x)
{
    printf("%d is an Armstrong Number",x);
}

else
{
    printf("%d is not an Armstrong Number",x);
}
}

```

Program7:-

```
#include<stdio.h>
```

```

main()
{
    int num,x,fact=1;

    printf("Enter the number\n");
    scanf("%d",&num);

    for(x=num;x>=1;x--)
    {
        fact = fact * x;
    }

    printf("The factorial of %d is %d",num,fact);
}

```

Program8:-

```
#include<stdio.h>
```

```

main()
{
    int num,temp,rem=0,x;

    printf("Enter the Number\n");
}

```

```
scanf("%d",&num);
temp = num;

for(x=0;temp>0;temp/=2)
{
    if((temp%2)==0)
    {
        rem = rem + 0;
    }
    else
    {
        rem = rem + 1;
    }

    rem = rem * 10;
}
rem = rem/10;
printf("The Binary Code for %d is %d",num,rem);
}
```