1. Program to convert decimal to hexadecimal

PROGRAM:

```
#include<stdio.h>

int main()

{

    int dec,rem,quo;

    int i=1,j,temp;

    char hexadecimalNumber[100];

    printf("Enter any decimal number: ");

    scanf("%ld",&dec);

    quo=dec;

    while(quo!=0) {

            temp=quo%16;

            if( temp<10)

               temp=temp+48;

            else

               temp=temp+55;

            hexadecimalNumber[i++]=temp;

            quo=quo/16;

    }

    printf("hexadecimal value of decimal number %d:",dec);

    for (j=i-1;j>0;j--)

       printf("%c",hexadecimalNumber[j]);

    return 0;

}
```

2. Program to convert Hexadecimal to decimal

PROGRAM:

```
#include <stdio.h>

int main()

{
```

```c
    int n;

    printf("enter hexadecimal number: ");

    scanf("%x",&n);

    printf("decimal number is: %d",n);

    return 0;

}
```

3. Program to convert decimal to octal

PROGRAM:

```c
#include <stdio.h>
#include <math.h>
int main()
{

    int octal,decimal=0;

    int i=0;

    printf("Enter an octal number: ");

    scanf("%ld",&octal);

    while(octal!=0)

    {

        decimal=decimal+(octal%10)*pow(8,i++);

        octal=octal/10;

    }

    printf("Decimal value: %ld",decimal);

    return 0;

}
```

4. Program to convert octal to decimal

PROGRAM:

```c
#include <stdio.h>

int main()

{
```

```c
    int num;

    printf("Enter the decimal number:  ");

    scanf("%d", &num);

    printf("Octal Number: %o", num);

    return 0;

}
```

5.   C Program to read a number and find its square

PROGRAM:

```c
#include<stdio.h>

int main()

{

    int n,s;

    printf("the number is ");

    scanf("%d",&n);

    s=n*n;

    printf("the square of the %d number: %d ",n,s);

}
```

6.   C Program to find the biggest of three numbers

PROGRAM:

```c
#include<stdio.h>

int main()

{

    int a,b,c;

    printf("enter the a, b and c values: ");

    scanf("%d%d%d",&a,&b,&c);

    if(a>b && a>c)

    {

            printf("a is biggest of three numbers");

    }

    else if(b>a && b>c)

    {
```

```
                printf("b is biggest of three numbers");
        }
    else
    {
      printf("c is biggest of three numbers");
      }
    return 0;
}
```

7. C Program to find leap year

PROGRAM:

```
#include<stdio.h>
int main()
{
    int year;
    printf("enter the year: ");
    scanf("%d",&year);
    if(year>0)
    {
            if(year%400==0)
            {
                    printf("leap year");
            }
            else
            {
                    printf("not leap year");
            }
    }
    else
    {
            printf("enter the correct year");
```

```c
    }
}
```

8. C Program to prepare mark list using elif statement

PROGRAM:

```c
#include<stdio.h>
int main()
{
    int m1,m2,m3,tot;
    float avg;
    printf("enter the first subject marks: ");
    scanf("%d",&m1);
    printf("enter the second subject marks: ");
    scanf("%d",&m2);
    printf("enter the third subject marks: ");
    scanf("%d",&m3);
    tot=m1+m2+m3;
    printf("total marks:%d\n",tot);
    avg=tot/3;
    printf("average:%f\n",avg);
    if (m1>=50 && m1<=100 && m2>=50 && m2<=100 && m3>=50 && m3<=100)
    {
            if (avg>=90)
            {
                    printf("\ngrade A");
            }
            else if(avg<90 && avg>=80)
            {
                    printf("\nGrade B");
            }
            else if(avg<80 && avg>=70)
            {
```

```c
                printf("\nGrade C");
        }
        else if(avg<70 && avg>=60)
        {
                printf("\nGrade D");
        }
        else
        {
                printf("\nFail");
        }
    }
    else
    {
        printf("\nenter the correct marks");
    }
}
```

9. C Program to perform arithmetic operation on two numbers

PROGRAM:

```c
#include<stdio.h>
int main()
{
    float a,b;
    float div;
    printf("enter a and b values: ");
    scanf("%d%d",&a,&b);
    printf("addition:%d",a+b);
    printf("subtraction:%d",a-b);
    printf("Multiplication:%d",a*b);
    div=a/b;
    printf("division:%.2f",div);
}
```

10. C Program to print n natural number

PROGRAM:

```c
#include <stdio.h>
int main()
{
        int i,n;
        printf("enter the number");
        scanf("%d",&n);
        for(i=1;i<=n;i++)
        {
                printf("%d\n",i);
        }
        return 0;
}
```

11. C Program to find area of different shapes

PROGRAM:

```c
int main()
{
        int l,b,h,r,s;
        printf("enter the length: ");
        scanf("%d",&l);
        printf("enter the breadth: ");
        scanf("%d",&b);
        printf("enter the height: ");
        scanf("%d",&h);
        printf("enter the side: ");
        scanf("%d",&s);
        printf("enter the radius: ");
        scanf("%d",&r);
        printf("\narea of the circle:%.2f",3.14*r*r);
        printf("\narea of the square:%d",s*s);
```

```
printf("\narea of the rectangle:%d",l*b);

printf("\narea of the triangle:%.2f",0.5*b*h);
}
```

12.C Program to check number is palindrome

PROGRAM:

```
#include<stdio.h>

int main()

{

  int n,r,sum=0,temp;

  printf("enter the number=");

  scanf("%d",&n);

  temp=n;

  while(n>0)

  {

    r=n%10;

    sum=(sum*10)+r;

    n=n/10;

  }

  if(temp==sum)

      {

    printf("palindrome number ");

      }

  else

  {

    printf("not palindrome");

      }

  return 0;

}
```