1)

```c
// squqring of given number

#include<stdio.h>
int value(int);     //function protype
int main()
{
        int a,b;
        printf("enter a numbers\n");
        scanf("%d",&a);
        b=value(a);                             //calling
        printf("the square of %d = %d",a,b);
        getch();
}
int value(a)           //function defination
{
        int p;
        p=a*a;
        return p;
}
```

2)

```c
// sum of two number

#include<stdio.h>
int sum(int,int);
int main()
{
        int a,b,x;
        printf("enter two number\n");
        scanf("%d%d",&a,&b);
        x=sum(a,b);
        printf("the sum is %d",x);
}
int sum(int a,int b)
{
        int s;
        s=a+b;
        return s;
}
```

3)

```c
#include<stdio.h>
int pro(int,int);
int main()
```

```c
{
        int a,b,x;
        printf("enter two number\n ");
        scanf("%d%d",&a,&b);
        x=pro(a,b);
        printf("the multiplication of tow number is %d",x);
        getch();
}
int pro(int a,int b)
{
        int p;
        p=a*b;
        return p;
}
```

4)

```c
//divide two number
#include<stdio.h>
int div(int ,int);
int main()
{
        int a,b,x;
        printf("enter two number\n");
        scanf("%d%d",&a,&b);
        x=div(a,b);
        printf("the divisible number is %d",x);
        getch();
}
int div(int a ,int b)
{
        int d;
        d=a/b;
        return d;
}
```

5)

```c
// difference of two number

#include<stdio.h>
int diff(int,int);
int main()
{
        int a,b,x;
        printf("enter two number\n");
        scanf("%d%d",&a,&b);
        x=diff(a,b);
```

```c
        printf("the difference is %d",x);
}
int diff(int a,int b)
{
        int d;
        d=a-b;
        return d;
}
```

6)

```c
//greatest number between two number

#include<stdio.h>
int great(int,int);
int main()
{
        int a,b,x;
        printf("enter two number\n");
        scanf("%d%d",&a,&b);
        x=great(a,b);
        printf("the greatest number is %d",x);
        getch();
 }
 int great(int a,int b)
 {

 if(a>b)
 {
        return a;
 }
        else
 {


        return b;
 }
}
```

7)

```c
// even odd
#include<stdio.h>
void evenodd(int);
int main()
{
        int n ;
```

```c
        printf("enter any  number\n");
        scanf("%d",&n);
        evenodd(n);

        getch();

}
void evenodd(int n)
{
        if(n%2==0)
        {
                printf("the number is even");
        }
        else
        {
                printf("the number is odd");
        }
}
```

8)

```c
// sum of two number without argument and with return value
#include<stdio.h>
int sum();
int main()
{
        sum();
        getch();
}
int sum()
{
        int a,b,c;
        printf("enter two number\n ");
        scanf("%d%d",&a,&b);
        c=a+b;
        printf("the sum is %d",c);
        return c;
}
```

9)

```c
// sum of two number with argument and without return value

#include<stdio.h>
void sum(int,int);
int main()
{
        int a,b;
```

```c
        printf("enter two number \n");
        scanf("%d%d",&a,&b);
        sum(a,b);
        getch();
}
void sum(a,b)
{
        int c;
        c=a+b;
    printf("the sum is %d",c);
}
```

10)

```c
// sum of two number without argument without return value

#include<stdio.h>
void sum();
int main()
{
        sum();
        getch();
}
void sum()
{
        int a,b,c;
        printf("enter two number\n");
        scanf("%d%d",&a,&b);
        c=a+b;
        printf("the sum is %d",c);


}
```

11)

```c
//display this is my first program using function

#include<stdio.h>
#include<conio.h>
void first();
void main()
{
    first();
    getch();
}
void first()
{
```

```c
        printf("\nThis is my first program\n");
        printf("-------------------------------------\n");
}

12)

// sum ,differce,product ,divide and modulo between two numbers using
function

#include<stdio.h>
int sum(int,int);
int diff(int,int);
int pro(int,int);
int div(int,int);
int rem(int,int);
int main()
{
        int a,b,w,x,y,z,k;
        printf("enter two numbers\n ");
        scanf("%d%d",&a,&b);
        w=sum(a,b);
        x=diff(a,b);
        y=pro(a,b);
        z=div(a,b);
        k=rem(a,b);
        printf("the sum is %d\n",w);
        printf("the difference is %d\n",x);
        printf("the product is %d\n",y);
        printf("the divide is %d\n",z);
        printf("the remainder is %d\n",k);
        getch();
}
int sum(a,b)
{
        int s;
        s=a+b;
        return s;
}
int diff(a,b)
{
        int d;
        d=a-b;
        return d;
}
int pro(a,b)
{
        int p;
        p=a*b;
```

```
        return p;
}
int div(a,b)
{
        int dv;
        dv=a/b;
        return dv;
}
int rem(a,b)
{
        int k;
        k=a%b;
        return k;
}
```

13)

```
//square and square root of given number using function
#include<stdio.h>
#include<math.h>
int sqr(int);
int value(int);
int main()
{
        int a,x,y;
        printf("enter a number\n");
        scanf("%d",&a);
        x=sqr(a);
        y=value(a);
        printf("the square is %d\n",x);
        printf("the squareroot is %d\n",y);
        getch();
}
int sqr(a)
{
        int p;
        p=a*a;
        return p;
}
int value(a)
{
        int b;
        b=sqrt(a);
        return b;
}
```

14)

```c
//temperature given in degree farehnheit into degree celsius using
function

#include<stdio.h>
void temp(int);
int main()
{
        float c;
        printf("enter any number\n");
        scanf("%f",&c);
        temp(c);


}
void temp(c)
{
    float f;
        f=1.8*c+32;
        printf("the temperature is %f",f);
}
```

15)

```c
//area and circumference of circle using function

#include<stdio.h>
void area(int);
void circumference(int);
int main()
{
        int r;
    float pi=3.14;
        printf("enter radius\n");
        scanf("%d",&r);
        area(r);
        circumference(r);
        getch();
}
void area(r)
{
        float a;
        a=3.14*r*r;
        printf("the area of circle is %f\n",a);
}
void circumference(r)
{
        float c;
        c=2*3.14*r;
```

```
        printf("The circumference of circle is %f\n",c);
}

16)

//pass or fail {pass=40%} using functon

#include<stdio.h>
int per(int);
int main()
{
        int p,x;
        printf("enter any number\n");
        scanf("%d",&p);
        x=per(p);
        printf("the percentage is %d ",x);
        getch();
}
int per(p)
{
        if(p>=40)
        {
            return p;
        }
        else
        {
            return 0;
        }
}


17)

// Recursion function

#include<stdio.h>
#include<conio.h>
long int fact(int);
int main()
{
         int n,x;
        printf("enter any number\n");
        scanf("%d",&n);
        x=fact(n);
        printf("the factorial is %d",x);
        return 0;
}
long int fact(int n)
```

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```
{
        if(n==0)
        return 1;
        else
        return (n*fact(n-1));
}
```