1. Remainder using function

```
#include<stdio.h>
int remainder(int,int);
int main()
{
int n,m,r;
printf("enter two nos:");
scanf("%d%d",&n,&m);
r=remainder(n,m);
printf("Remainder is: %d",r);
getch();
return 0;
}
int remainder(int n,int m)
{
        int r;
        r=n%m;
        return r;
}
```

2.Print every no from 1 to n divisible by m and also check if it is odd or even

```
#include<stdio.h>
int divisible(int,int);
int main()
{
int n,m;
printf("enter two nos:");
scanf("%d%d",&n,&m);
divisible(n,m);
getch();
return 0;
}
```

```
int divisible(int n,int m)
{
	int i;
	for(i=m;i<n;i++)
	{
		if (i%m==0)
		{
			if(i%2==0)
				printf("%d is divisible by %d and even\n",i,m);
			else
				printf("%d is divisible by %d and odd\n",i,m);
		}
	}
}
```

2. Accept 10 nos and find max no.

```
#include<stdio.h>
void max();
void main()
{
	max();
	getch();
}
void max()
{
	int no, max,i;
	printf("Enter no");
	scanf("%d",&max);
	for(i=0;i<10;i++)
	{
		scanf("%d",&no);
		if(max<no)
		max=no;
	}
	printf("max no is %d",max);
	getch();
}
```

3. 3. Accept 10 nos and find max no. and second max no.

```
#include<stdio.h>
void max_nmax();
```

```
void main()
{
        max_nmax();
        getch();
}
void max_nmax()
{
        int no, max,nmax,i,t;
        printf("Enter 2 nos");
        scanf("%d%d",&max,&nmax);
        if(max<nmax)
                {
                        t=max;
        max=nmax;
        nmax=t;
        }
        for(i=0;i<7;i++)
        {
                scanf("%d",&no);
                if(no>max)
                {
                        nmax=max;
                        max=no;
                }
                else if(no>nmax)
                        nmax=no;
        }
        printf("max no is %d",max);
        printf("nmax no is %d",nmax);
        getch();
}
```

4. Accept no and print table of that no

```
#include<stdio.h>

void table(int);

void main()

{

        int no;

        printf("Enter no");

        scanf("%d",&no);

        table(no);

        getch();

}
```

```
void table(int no)
{
        int i,ans;
        for(i=1;i<=10;i++)
        {
                ans=no*i;
                printf("%d X %d= %d\n",no,i,ans);
        }
        getch();
}
```

5. Accept no and print all tables till that no

```
#include<stdio.h>
void table(int);
void main()
{
    int no;
    printf("Enter no");
    scanf("%d",&no);
    table(no);
    getch();
}
void table(int no)
{
    int i,ans,j;
    for(j=1;j<=no;j++)
    {
    for(i=1;i<=10;i++)
    {
            ans=j*i;
            printf("%d X %d= %d\n",j,i,ans);
```

```
    }
    }
    getch();
}
```

6. Accept no and print tables till that no sidewise

```
#include<stdio.h>
void table(int);
void main()
{
        int no;
        printf("Enter no");
        scanf("%d",&no);
        table(no);
        getch();
}
void table(int no)
{
        int i,ans,j;
        for(j=1;j<=10;j++)
        {
        for(i=1;i<=no;i++)
        {
                ans=j*i;
                printf("%d X %d= %d                ",i,j,ans);
        }
        printf("\n");
        }
        getch();
}
```

7. Even and odd

```
Logic 1
if(no%2==0)
printf("Even");
else
printf("odd");

Logic 2
q=no/2;
if(q*2==no)
printf("even");
else
printf("odd");
```

Logic 3

```
r=no&1;
printf("even");
else
printf("odd");
```

Logic 4

```
while(a>2)
{
a=a-2;
}
if(a==2)
printf("even");
else
printf("odd")
```

8. Fibonacci

```
#include<stdio.h>
void fibonacci();
int main()
{
        int t;
        printf("Enter term");
        scanf("%d",&t);
        fibonacci(t);
        getch();
        return 0;
}
void fibonacci(int t)
{
        int a=0,b=1,i,c;
        if(t==0)
                printf("Invalid Data");
        else if(t==1)
                printf("%d",a);
        else if(t==2)
                printf("%d %d",a,b);
        else
        {
                printf("%d %d",a,b);
                for(i=1;i<=t-2;i++)
                {
                        c=a+b;
                        printf(" %d ",c);
                        a=b;
                        b=c;
```

```
                    }
                }
        }
```

9. Count no of Factors

```
#include<stdio.h>
int factor(int);
void main()
{
int n,c;
printf("Enter no:");
scanf("%d",&n);
c=factor(n);
printf("no of factors are: %d",c);
getch();
}
int factor (int n)
{
 int i,c=2;
 for (i=2;i<n/2;i++)
 {
        if(n%i==0)
        {
                c++;
        }
 }
 return c;
}
```

10. Prime no

```
//Prime no
#include<stdio.h>
int factor(int);
void main()
{
int n,c;
printf("Enter no:");
scanf("%d",&n);
c=factor(n);
if(c==2)
    printf("prime no");
```

```
else printf("not a prime no");
getch();
}
int factor (int n)
{
 int i,c=2;
 for (i=2;i<n/2;i++)
 {
       if(n%i==0)
       {
                  c++;
                  break;
       }
 }
 return c;
}
```

11. Call by value and call by address

```
//call by value
#include<stdio.h>
void change(int);
void main()
{
          int no;
          no=5;
          change(no);
          printf("\n%d",no);
getch();
}
void change(int no)
{
          no=no+5;
          printf("%d",no);
}

//call by address
#include<stdio.h>
void change(int *);
void main()
{
```

```
        int no;
        no=5;
        change(&no);
        printf("\n%d",no);
    getch();
    }
    void change(int *no)
    {
        *no=*no+5;
        printf("%d",*no);
    }
```

12. Pointer Concept

```
#include<stdio.h>

int main()

{

    int no,*p,*n,**x;

    printf("Enter no");

    scanf("%d",&no);

    printf("%u\n",&no);//2004

    printf("%d\n",*(&no));//5

    p=&no;

    printf("%d\n",*p);//5

    printf("%d\n",p);//2004

    printf("%d\n",&p);//2000

    *p=9;

    n=p;

    printf("%d\n",*n);//9

    printf("%d\n",**(&p));//9

    x=&p;

    printf("%d\n",**x);//9

    printf("%d",sizeof(p));//4

    getch();

    return 0;

}
```

Programs with pointer concept

```
//swap using pointer
#include<stdio.h>
void swap(int*,int*);
int main()
{
    int a,b;
    a=2;
    b=3;
    swap(&a,&b);
    printf("%d %d",a,b);
    getch();
    return 0;
}
void swap(int *a,int *b)
{
    int t;
    t=*a;
    *a=*b;
    *b=t;
}
```

```
//square and cube using pointer
#include<stdio.h>
void sc(int,int*,int*);
int main()
{
    int b=3,s,c;
    sc(b,&s,&c);
    printf("square is %d\n",s);
    printf("cube is %d",c);
```

```
	getch();
	return 0;
}
void sc(int n,int *s,int *c)
{
	*s=n*n;
	*c=n*n*n;
}

//square and cube using pointer
#include<stdio.h>
void ap(float,float*,float*);
int main()
{
	float r,a,p;
	printf("Enter no:");
	scanf("%f",&r);
	ap(r,&a,&p);
	printf("area is %f\n",a);
	printf("perimeter is %f",p);
	getch();
	return 0;
}
void ap(float r,float *a,float *p)
{
	float pi=3.14;
	*a=pi*r*r;
	*p=2*pi*r;
}
```