

//1.Sum of two numbers

//Predefined method

#include<stdio.h>

#include<conio.h>

void main()

{

int a=10,b=20,c=0;

clrscr();

c=a+b;

printf("Sum = %d",c);

getch();

}

//2.Addition of 2 numbers

//User-defined method

#include<stdio.h>

#include<conio.h>

void main()

{

int a,b,c;

clrscr();

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

c=a+b;

printf("Sum = %d",c);

getch();

}

//3.Simple If statement

#include<stdio.h>

#include<conio.h>

void main()

{

int a,b;

clrscr();

scanf("%d",&a);

if(a>=18)

printf("U are eligible for vote");

else

printf("U are not eligible for vote");

getch();

}

//4.Nested If_Else statement

#include<stdio.h>

#include<conio.h>

void main()

{

int a,b,c;

clrscr();

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

if(a>b)

{

if(a>c)

printf("A is bigger");

}

else if(b>c)

printf("B is bigger");

else

printf("C is bigger");

getch();

}

//5.Switch statement(with break)

#include<stdio.h>

#include<conio.h>

void main()

{

int choice;

clrscr();

printf("Enter choice number ");

scanf("%d",&choice);

switch(choice)

{

case 1: printf("One");

break;

case 2: printf("Two");

break;

case 3: printf("Three");

break;

default: printf("Enter numbers 1 to 3");

}

getch();

}

//6.Switch statement(without break)

#include<stdio.h>

#include<conio.h>

void main()

{

int choice;

clrscr();

printf("Enter choice value ");

scanf("%d",&choice);

switch(choice)

{

case 1: printf("One");

case 2: printf("Two");

case 3: printf("Three");

default:printf("Enter numbers 1 to 3");

}

getch();

}

```
//7.for loop
//to print natural numbers 1-50
#include<stdio.h>
#include<conio.h>
void main()
{
int i;
clrscr();
for(i=1;i<=50;i++)
printf("%d\n",i);
getch();
}
```

```
//8.for loop
//to print even numbers 1-50
#include<stdio.h>
#include<conio.h>
void main()
{
int i;
clrscr();
for(i=1;i<=50;i++)
{
if(i%2==0)
printf("%d\n",i);
}
getch();
}
```

```
//9.for loop with break
//to print even numbers 1-100
#include<stdio.h>
#include<conio.h>
void main()
{
int i=2;
clrscr();
for(;;i=i+2)
{
if(i>100)
break;
printf("%d\n",i);
}
getch();
}
```

```
//10.for loop with break
//to print odd numbers 1-100
#include<stdio.h>
#include<conio.h>
void main()
{
int i=1;
```

```
clrscr();
for(;;)
{
if(i>100)
break;
printf("%d\n",i);
i=i+2;
}
getch();
}
```

```
//11.infinite for loop
//to print your name
#include<stdio.h>
#include<conio.h>
void main()
{
clrscr();
for(;;)
printf("Raja");
}
```

```
//12.while loop
//to print welcome
#include<stdio.h>
#include<conio.h>
void main()
{
int i=1;
clrscr();
while(i<=10)
{
printf("\n Welcome");
i=i+1;
}
getch();
}
```

```
//13.do while loop
//to print welcome
#include<stdio.h>
#include<conio.h>
void main()
{
int i=0;
clrscr();
do
{
printf("\n Welcome");
i=i+1;
}while(i<10);
getch();
}
```

```
//14.Biggest of two numbers
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b;
clrscr();
printf("Enter the two numbers \n");
scanf("%d%d",&a,&b);
{
if(a>b)
printf("\nThe biggest number is
%d",a);
else
printf("\nThe biggest number is
%d",b);
}
getch();
}

//15.postive or negative or zero
#include<stdio.h>
#include<conio.h>
void main()
{
int a;
clrscr();
printf("Enter a number");
scanf("%d",&a);
{
if(a>0)
printf("the given number is postive");
else if(a<0)
printf("the given number is negative");
else
printf("the given number is zero");
}
getch();
}

//16.Maximum number in the row 3x3
#include<stdio.h>
#include<conio.h>
void main()
{
int i,j,a[3][3],max=0,rowmax[3];
clrscr();
printf("enter the 9 elements");
for(i=0;i<3;i++)
{
for(j=0;j<3;j++)
{
scanf("%d",&a[i][j]);
```

```
if(a[i][j]>max)
max=a[i][j];
}
rowmax[i]=max;
}
printf("Given Matrix\n");
for(i=0;i<3;i++)
{
for(j=0;j<3;j++)
printf("%d\t",a[i][j]);
printf("\n");
}
for(i=0;i<3;i++)
printf("\nMaximum element
%d",rowmax[i]);
getch();
}
```

```
//17.Addtion of matrix 3x3
#include<stdio.h>
#include<conio.h>
void main()
{
int i,j,a[3][3],b[3][3],c[3][3];
clrscr();
printf("Enter A matrix");
for(i=0;i<=2;i++)
for(j=0;j<=2;j++)
scanf("%d",&a[i][j]);
printf("Enter B matrix");
for(i=0;i<=2;i++)
for(j=0;j<=2;j++)
scanf("%d",&b[i][j]);
printf("Aaddtion of matrix \n");
for(i=0;i<=2;i++)
{
for(j=0;j<=2;j++)
{
c[i][j]=a[i][j]+b[i][j];
printf("%d\t",c[i][j]);
}
printf("\n\n");
}
getch();
}
```

```
//18.Multiplication of 3 x 3 matrix
#include<stdio.h>
#include<conio.h>
void main()
{
int i,j,k,a[3][3],b[3][3],c[3][3];
clrscr();
```

```
printf("Enter A matrix");
for(i=0;i<=2;i++)
for(j=0;j<=2;j++)
scanf("%d",&a[i][j]);

printf("Enter B matrix");
for(i=0;i<=2;i++)
for(j=0;j<=2;j++)
scanf("%d",&b[i][j]);

for(i=0;i<=2;i++)
{
for(j=0;j<=2;j++)
{
c[i][j]=0;
for(k=0;k<=2;k++)
{
c[i][j]=c[i][j]+a[i][k]*b[k][j];
}}}

printf("Multiplication of A x B is\n");
for(i=0;i<=2;i++)
{
for(j=0;j<=2;j++)
printf("%d\t",c[i][j]);
printf("\n");
}
getch();
}

//19.Transpose of 3 x 3 matrix
#include<stdio.h>
#include<conio.h>
void main()
{
int i,j,a[3][3];
clrscr();
printf("Enter A matrix");
for(i=0;i<=2;i++)
for(j=0;j<=2;j++)
scanf("%d",&a[i][j]);
printf("Transpose of Matrix is\n");
for(i=0;i<=2;i++)
{
for(j=0;j<3;j++)
printf("%d\t",a[j][i]);
printf("\n");
}
getch();
}

//20.To Interchange values of 2 variables
#include<stdio.h>
```

```
#include<conio.h>
void main()
{
int a,b,t;
clrscr();
printf("\nEnter two numbers");
scanf("%d%d",&a,&b);
printf("\n After swapping
a=%d,b=%d",a,b);
t=a;
a=b;
b=t;
printf("\n After swapping
a=%d,b=%d",a,b);
getch();
}

//21.To print your name 5 times
#include<stdio.h>
#include<conio.h>
void main()
{
char name[]="Robinson";
int i,j;
clrscr();
for(j=1;j<=5;j++)
for(i=0;i<=7;i++)
printf("%c",name[i]);
getch();
}

//22.area of triangle
#include<stdio.h>
#include<conio.h>
void main()
{
float a,b,c,s,area;
clrscr();
scanf("%f%f%f",&a,&b,&c);
s=(a+b+c)/2;
area=sqrt(s*(s-a)*(s-b)*(s-c));
printf("Area = %f",area);
getch();
}

//23.Fahrenheit to celius
#include<stdio.h>
#include<conio.h>
void main()
{
float faren,cel;
clrscr();
```

```
printf("Enter fahrenheit value\n");
scanf("%f",&faren);
cel=(faren - 32)*(5.0/9.0);
printf("Celsius = %f",cel);
getch();
}
```

```
//24.Convert the time in
//hours,minutes,seconds to seconds
#include<stdio.h>
#include<conio.h>
void main()
{
int hr,mt,sec,totsec;
clrscr();
printf("Enter Hour : Minutes :
Seconds\n");
scanf("%d%d%d",&hr,&mt,&sec);
totsec=(hr*60*60)+(mt*60)+sec;
printf("Total seconds : %d\t",totsec);
getch();
}
```

```
//25.Biggest of 2 nos. without if control
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
int a,b,big;
clrscr();
printf("Enter two numbers\n");
scanf("%d%d",&a,&b);
big=((a+b)+abs(a-b))/2;
printf("Biggest number is %d",big);
getch();
}
```

```
//26. sum=1+2+3+4+.....100 find sum
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
int i,sum=0;
clrscr();
for(i=1;i<=100;i++)
sum=sum+i;
printf("Sum is : %d",sum);
getch();
}
```

```
//27.Fibonacci series(15 terms)
#include<stdio.h>
#include<conio.h>
void main()
{
int i,n,f1,f2,f3;
f1=0;
f2=1;
clrscr();
printf("Enter n value :");
scanf("%d",&n);
printf("\n%d",f1);
printf("\n%d",f2);
for(i=1;i<=n-2;i++)
{
f3=f1+f2;
printf("\n%d",f3);
f1=f2;
f2=f3;
}
getch(); }
```

```
//28.To count no.fo vowels present in
your name
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
int i,j,len,count=0;
char s[50];
char vowels[]="aeiou";
clrscr();
printf("\n Enter your name :");
scanf("%s",s);
len=strlen(s);
for(i=0;i<len;i++)
{
for(j=0;j<len;j++)
if(s[j]==vowels[i])
count=count+1;
}
printf("\n No.of Vowels : %d",count);
getch();
}
```

```
//29.Palindrome or not
#include<stdio.h>
#include<string.h>
void main()
{
char name[50];
char rev[50];
```

```
int b;
clrscr();
printf("\n Enter your name :");
scanf("%s",name);
strcpy(rev,name);
strrev(name);
b=strcmp(name,rev);
if(b!=0)
printf("\n Not Palindrome");
else
printf("\n Palindrome");
getch();
}
```

//30.Average of 10 numbers using array

```
#include<stdio.h>
#include<string.h>
void main()
{
int a[10],i;
float sum=0,avg=0;
clrscr();
for(i=0;i<10;i++)
{
scanf("%d",&a[i]);
sum=sum+a[i];
}
avg=sum/10;
printf("Average of 10 numbers
:%f",avg);
getch();
}
```

//31.Given number is in Fibonacci sequence or not

```
#include<stdio.h>
#include<string.h>
void main()
{
int first=0;
int second=1,third=0;
int n,i;
clrscr();
printf("\nEnter the number");
scanf("%d",&n);
i=n-1;
for(i=0;i<=n-1;i++)
{
third=first+second;
if(third==n)
printf("Is in fibonacci sequence");
first=second;
second=third;
}
```

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

//32.Increment and Decrement Operators

```
#include<stdio.h>
void main()
{
int a=30,b=40;
int c,d;
clrscr();
printf("\n%d %d",a++,++a);
printf("\n%d %d",--a,b--);
printf("\n%d %d",a++,++b);
c=a++ + a--;
d=a-- - b--;
printf("\n%d %d",c,d);
getch();
}
```

//33.Pointer Variables

```
#include<stdio.h>
#include<conio.h>
void main()
{
int *p,x,i=30;
p=&i;
x=10;
clrscr();
printf("\nValue of x %d",x); //10
printf("\nAddress of x %d",&x); //-14
printf("\nAddress of i %d",p); //-16
printf("\nValue of i %d",*p); //30
printf("\nAddress of p %d",&p); //-12
getch();
}
```

//34.Array Pointers

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a[]={20,10,90};
clrscr();
printf("\n %d",*a); //20
printf("\n %d",a[0]); //20
printf("\n %d",*(&a[0])); //20
printf("\n %d",&a[0]); //-16
printf("\n %d",&a[1]); //-14
printf("\n %d",&a[2]); //-12
getch();
}
```

```
//35.To find factorial of
//given numbers using function
#include<stdio.h>
int factorial(int n)
{
int i,f=1; // loacal or formal variables
for(i=1;i<=n;i++)
f=f*i;
return f;
}
void main()
{
int n,fac; // actual variables
int factorial(int); // function prototype
clrscr();
printf("Enter factorial number");
scanf("%d",&n);
fac=factorial(n); // function calling
printf("Factorial of given number
is:%d",fac);
getch();
}
```

```
//36.Array of Structures
//to get 5 student marks and total
#include<stdio.h>
struct student
{
int rollno,total;
}x[5]; //array structure objects
void main()
{
int i;
clrscr();
for(i=0;i<5;i++)
{
printf("\nEnter rollno and total mark");
scanf("%d",&x[i].rollno);
scanf("%d",&x[i].total);
}
for(i=0;i<5;i++)
{
printf("\nRollno :%d",x[i].rollno);
printf("\tTotal :%d",x[i].total);
}
getch();
}
```

```
//37.Abandant number between 1-100
#include<stdio.h>
void main()
{
```

```
int div,num,sum=0;
clrscr();
for(num=1;num<=100;num++)
{
sum=0;
for(div=1;div<num;div++)
if(num%div==0)
sum=sum+div;
if(sum>num)
printf("\n %d is Abudant
number",num);
}
getch();
}
```

```
//38.Call by Value using function
#include<stdio.h>
#include<conio.h>
void swap(int x,int y)
{
int temp; //formal variables
temp=x;
x=y;
y=temp;
printf("\n After swapping
%d%d",x,y);
}
void main()
{
int a=10,b=20; // actual variables
clrscr();
printf("\n Before swapping
%d%d",a,b);
swap(a,b); //function calling by value
getch();
}
```

```
//39.Perfect number between 1-100
#include<stdio.h>
void main()
{
int div,num,sum=0;
clrscr();
for(num=1;num<=100;num++)
{
sum=0;
for(div=1;div<num;div++)
if(num%div==0)
sum=sum+div;
if(sum==num)
printf("\n %d is Perfect
number",num);
} getch(); }
```

```
//40.Binary to Decimal conversion
#include<stdio.h>
#include<math.h>
#include<conio.h>
void main()
{
    long int n,dec,i;
    clrscr();
    i=dec=0;
    printf("Enter the binary number");
    scanf("%ld",&n);
    while(n!=0)
    {
        dec=dec+(n%10)*pow(2,i);
        n=n/10;
        i=i+1;
    }
    printf("The decimal number is
    %d",dec);
    getch();
}
```

```
//41.Decimal to Binary Conversion
#include<stdio.h>
#include<math.h>
#include<conio.h>
void main()
{
    int i,j,n;
    int b[15];
    clrscr();
    i=0;
    printf("Enter the number");
    scanf("%d",&n);
    while(n!=0)
    {
        b[i]=n%2;
        n=n/2;
        i=i+1;
    }
    printf("The binary value is");
    i=i-1;
    for(j=i;j>=0;j--)
    printf("%d",b[j]);
    getch();
}
```

```
//42.Star Pattern1
#include<stdio.h>
#include<conio.h>
void main() {
    int i,j;
```

```
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(j=1;j<=i;j++)
        printf("%d",i);
        printf("\n");
    }
    getch();
}
```

```
//43.Star Pattern2
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,j;
    clrscr();
    for(i=5;i>=1;i--)
    {
        for(j=1;j<=i;j++)
        printf("*");
        printf("\n");
    }
    getch();
}
```

```
//44.Star Pattern3
void main()
{
    int i,j;
    clrscr();
    for(i=5;i>=1;i--)
    {
        for(j=1;j<=i;j++)
        printf("%d",i);
        printf("\n");
    }
    getch();
}
```

```
//45.Star Pattern4
void main()
{
    int i,j;
    clrscr();
    for(i=15;i>=1;i--)
    {
        for(j=1;j<=i;j++)
        printf("%d",i);
        printf("\n");
    }
    getch();
}
```