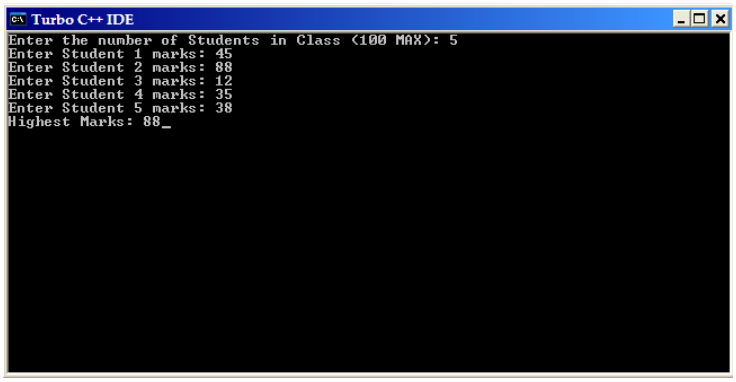
Program to Input Marks of Students in Array and Print largest Number.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n, marks[99], l=0, i ;
    printf("Enter the number of Students in Class (100 MAX): ");
    scanf("%d",&n);
    for(i=0;i<n;i++){
        printf("Enter Student %d marks: ",i+1);
        scanf("%d",&marks[i]);
        if(l<marks[i]) l=marks[i];
        }
    printf("Highest Marks: %d",l);
getch();
}
```

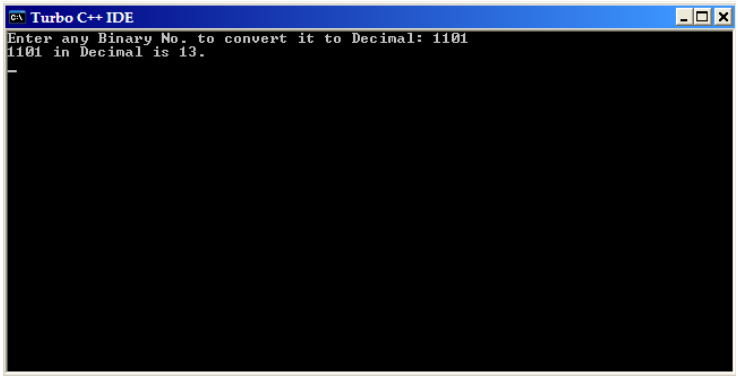
Output:



Program to convert Binary number to Decimal Number.

```
#include <stdio.h>
#include<conio.h>
#include <math.h>
void main()
{
    int i=0, bin, swap, dec=0, temp;
    printf("Enter any Binary No. to convert it to Decimal: ");
    scanf("%d",&bin);
    temp=bin;
    while( bin!=0 ){
        swap = bin%10;
        bin /= 10;
        dec += swap*pow(2,i);
        i++;
    }
    printf("%d in Decimal is %d.",temp,dec);
getch();
}
```

Output:



Program to find all Possible Factors of a given positive integer.

```
#include <stdio.h>
#include <conio.h>
void main()
{
  int number, i;
   clrscr();

    printf("Enter a positive integer: ");
    scanf("%d",&number);

    printf("Factors of %d are: ", number);

    for(i=1; i <= number; ++i)
    {
        if (number%i == 0)
        {
                printf(" %d ",i);
        }
    }
    getch();
}
```

Output:

Program to Check whether a Year is Leap Year or Not.

```
#include <stdio.h>
#include <conio.h>
void main()
{
  int year;
  clrscr();

  printf("Enter the year: ");
  scanf("%d" ,&year);

  if ( year%4==0 )
                {
                        printf("\n%d is a Leap year." ,year);
                }
        else
                {
                        printf("\n%d is not a Leap year." ,year);
                }
  getch();
}
```

Output:

Program to find sum of first N Numbers.

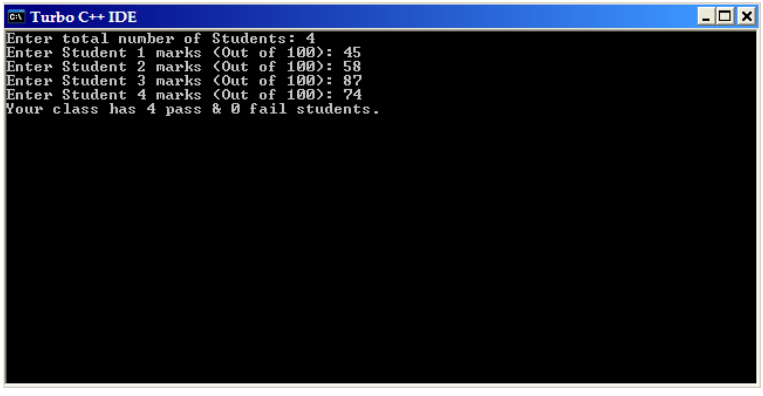
```
#include <stdio.h>
#include <conio.h>
void main()
{
   int i, num, sum = 0;
   clrscr();

   printf("Enter a number to find sum upto: ");
   scanf ("%d", &num);

        for (i = 1; i <= num; i++)
         {
            sum += i;
         }

   printf ("Sum of first %d natural numbers = %d\n", num, sum);
   getch();
}
```

Output:

Program to Find out Pass & Failed number of Students by inputting their Marks.

```
#include<stdio.h>
#include<conio.h>
void main()
{
   int st, pass=0, fail=0, num;
   printf("Enter total number of Students: ");
   scanf("%d",&st);
   for(int i = 1; i <= st; i++)
   {
      again:
      printf("Enter Student %d marks (Out of 100): ",i);
      scanf("%d",&num);
      if(num<=100){
      if(num>=40) pass++;
      else if(num<40) fail++;
      }else {
         printf("Total Marks Can't be greater than 100 !!!\n");
         goto again; }
   }
   printf("Your class has %d pass & %d fail students.\n",pass,fail);
getch();
}
```

Output:



Program to get Fibonacci series up to Nth term.

```
#include <stdio.h>
#include <conio.h>
void main()
{
   int i, n, t1 = 0, t2 = 1, nextTerm;
    clrscr();

    printf("Enter the number of terms: ");
    scanf("%d", &n);

    printf("Fibonacci Series: ");

    for (i = 1; i <= n; ++i)
    {
        printf("\n%d", t1);
        nextTerm = t1 + t2;
        t1 = t2;
        t2 = nextTerm;
    }
    getch();
}
```

Output:

Program to print Triangle Star pattern.

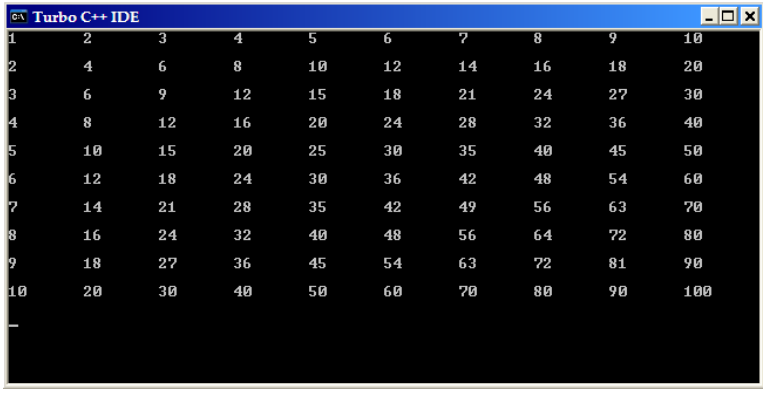
```
#include<stdio.h>
#include<conio.h>
void main()
{
   for(int i=1;i<=5;i++){
      for(int j=i;j<5;j++){
         printf(" ");
      }
      for(int k=1;k<=(2*i-1);k++){
         printf("*");
      }printf("\n");
   }
getch();
}
```

Output:

Program to print Multiplication Table from 1 to 10.

```
#include<stdio.h>
#include<conio.h>
void main()
{
 for(int i=1 ; i<=10 ; i++){
     for(int j=1 ; j<=10 ; j++){
        printf("%d\t",i*j);
     }
     printf("\n");
 }
getch();
}
```

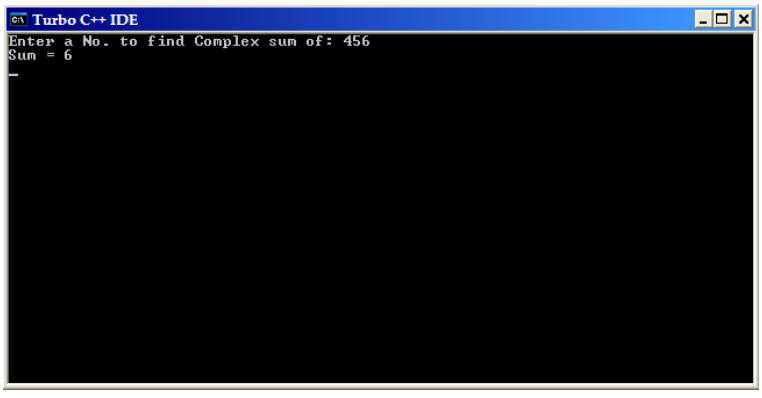
Output:



Program to Find Repetitive or Complex Sum of Number.

```
#include<stdio.h>
#include<conio.h>
void main()
{
   int swap=0, num, sum=0;
   printf("Enter a No. to find Complex sum of: ");
   scanf("%d", &num);
            while(num!=0){
            swap=num%10;
            num/=10;
            sum+=swap;
               }
            while(sum>0){
               swap=sum%10;
               sum/=10;
               num+=swap;
               }
      printf("Sum = %d\n",num);
getch();
}
```

Output:

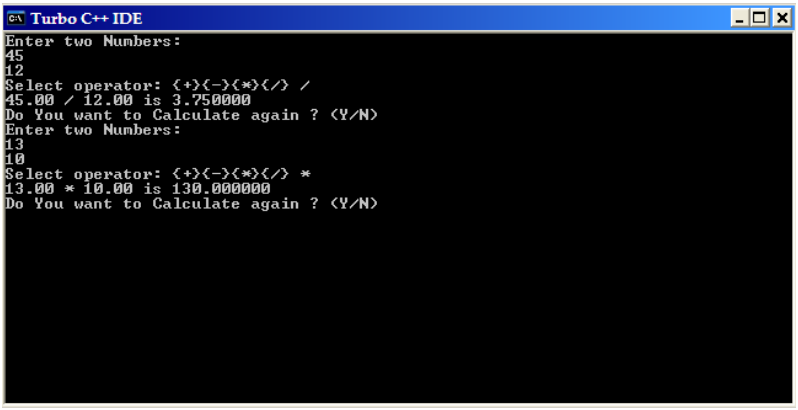


Program of Simple Calculator using Switch.

```
#include<stdio.h>
#include<conio.h>
void main()
        {
          float small,large,res; char ch;
          do{
            printf("Enter two Numbers: \n");
            scanf("%f%f",&large,&small);
                      }
               again:
               printf("Select operator: {+}{-}{*}{/} ");
                    ch=getch();
                    printf("%c",ch);
                    switch(ch){
                       case '+':
                       {
                          res=large+small;
                          break;
                       }
                       case '-':
                       {
                          res=large-small;
                          break;
                       }
                       case '*':
                       {
                          res=small*large;
                          break;
                       }
                       case '/':
                       {
                          res=large/small;
                          break;
                       }
                       default:
```

```
                    {
                                printf("\n!!!  Wrong Choice  !!!\n");
                                goto again;
                  break;
                  }
          }
 printf("\n%.2f %c %.2f is %f",large,ch,small,res);
 printf("\nDo You want to Calculate again ? (Y/N)\n");
    ch=getch();
         clrscr();
       }while(ch=='Y'||ch=='y');
getch();
}
```

Output:

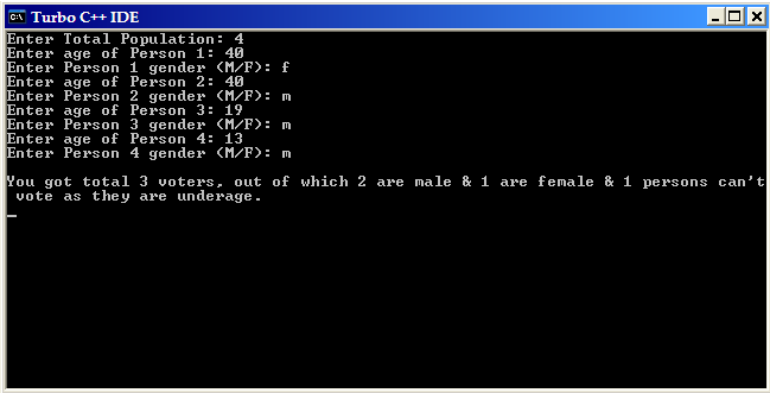


Program to find total Number of Male & Female Voters By getting their Age and Gender as Input.

```
#include<stdio.h>
#include<conio.h>
void main()
{
   int nvot, age, male=0, female=0, voter=0, pop;
   char gen;
   printf("Enter Total Population: ");
   scanf("%d",&pop);

   for(int i = 1; i <= pop; i++)
   {
      printf("Enter age of Person %d: ",i);
      scanf("%d",&age);
      if (age>=18) voter++;

      again:
      printf("Enter Person %d gender (M/F): ",i);
      gen=getch();
      printf("%c\n",gen);
      if (gen=='M'||gen=='m'){
         if(age>=18) male++ ;
            else continue;
      }

         else if (gen=='F'||gen=='f'){
         if(age>=18) female++ ;
            else continue;
      }
          else {
         printf("Are you sure this is an option?\nTry Again!!!\n");
         goto again;
      }

}
```

```
nvot=pop-voter;


printf("\nYou got total %d voters, out of which %d are male & %d are female & %d persons can't vote as they are underage.\n",voter, male, female, nvot);
getch();
}
```

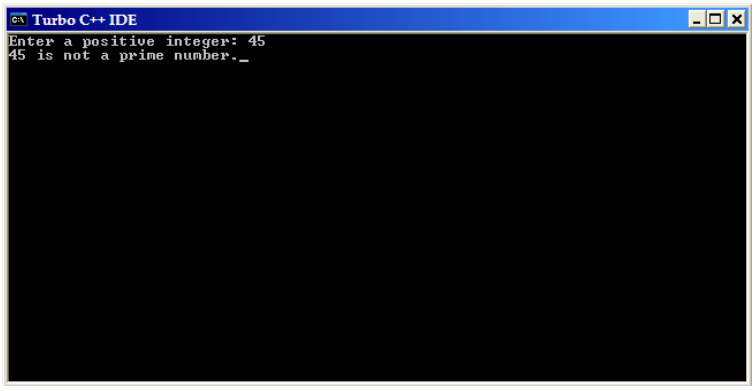
Output:



Program to Find out whether a Number is Prime or Not.

```
#include <stdio.h>
#include<conio.h>
void main()
{
   int n, i, flag = 0;
   printf("Enter a positive integer: ");
   scanf("%d", &n);
   for(i = 2; i <= n/2; i++)
   {
      if(n%i==0) {
         flag = 1;
         break;  }
   }      if (n == 1)
         printf("1 is neither a prime nor a composite number.");
           else {
              if (flag == 0)
        printf("%d is a prime number.", n);
      else
        printf("%d is not a prime number.", n);
   }
getch();
}
```

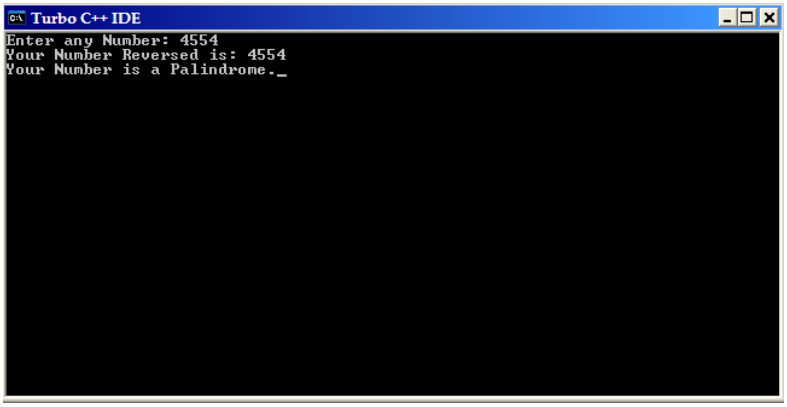
Output:



Program to Find Reverse of a Number & check whether it's Palindrome or Not.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int num,rev=0,d,c=0,sum=0,temp;
    printf("Enter any Number: ");
    scanf("%d",&num);
    temp=num;
    while(num>0){
        d=num%10;
        num=num/10;
        rev=(rev*10)+d;
    }
    printf("Your Number Reversed is: %d",rev);
printf("\nYour Digit Sum is %d containing %d digits.",sum,c);
    if (temp==rev) printf("\nYour Number is a Palindrome.");
getch();
}
```

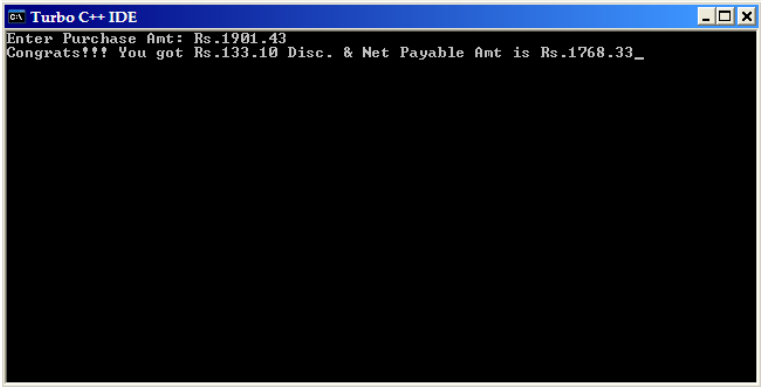
Output:



Program to Find Discount & Net Amount by Total Purchase Amt.

```
#include<stdio.h>
#include<conio.h>
void main()
{
   float pAmt,disc,net;
   printf("Enter Purchase Amt: ");
   scanf("%f",&pAmt);
   if(pAmt<500){
      disc=0;
      net=pAmt;
   }  else if(pAmt>=500 && pAmt<1000){
      disc=0.05*pAmt;
      net=pAmt-disc;
   }  else if(pAmt>=1000 && pAmt<2000){
      disc=0.07*pAmt;
      net=pAmt-disc;
   }  else {
      disc=0.1*pAmt;
      net=pAmt-disc;
   }
   printf("Congrats!!! You got Rs.%.2f Disc. & Net Payable Amt is %.2f",disc,net);
getch();
}
```

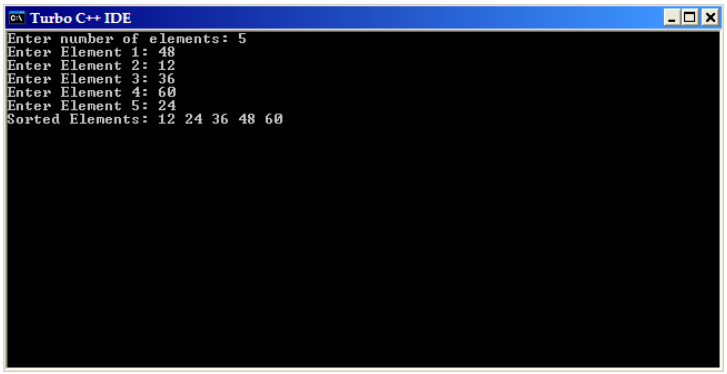
Output:



Program to sort Elements of An Array using Selection Sort.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int a[100],i,n,t;
    printf("Enter number of elements: ");
    scanf("%d",&n);
    for(i=0;i<n;i++){
        printf("Enter Element %d: ",i+1);
        scanf("%d",&a[i]);
    }  for(i=0;i<n-1;i++){
        for(int j=i+1;j<n;j++){
            if(a[i]>a[j]){
                t=a[i];
                a[i]=a[j];
                a[j]=t;}
            }   }
        printf("Sorted Elements: ");
        for(i=0;i<n;i++){
            printf("%d ",a[i]);
        }
getch();
}
```

Output:



Program to find Factorial of a given positive integer.

```
#include <stdio.h>
#include <conio.h>
void main()
{
   int i, n;
   unsigned long long fact=1;
   clrscr();
   printf("Enter an Positive Integer to find Factorial of: ");
   scanf("%d" ,&n);
   if ( n<0 )
      printf("\nError! You Entered a Negative Value");
   else
   {
      for (i = 1; i <= n; ++i)
      {
        fact *= i;
      }
      printf("\nFactorial of %d is %llu" ,n ,fact);
   }
   getch();
}
```

Output: