```c
#include<conio.h>

#include<stdio.h>

#include<math.h>

#include<iostream.h>

int songuyento(int m)

{ int i;

if(m<=1)  return -1;

if((m==2)||(m==3)) return 1;

if(m>3)

{

  for(i=2;i<m;i++)

  if(m%2==0)   return -1;

  return 1;

}

}

int sochinhphuong(int m)

{

int i;

if(m<1)        return -1;

if(m>=1)

{

  i=sqrt(m);

  if(i*i==m)  return 1;

  else return -1;
```

```
}
}
int songuyenhoantoan(int m)
{
int i,S;
if(m<6)  return -1;
if(m>=6)
{S=0;
for(i=1;i<m;i++)
 if(m%i==0)
  S=S+i;
  if(S==m)  return 1;
  else  return -1;


}
}
int sochan(int m)
{
        if(m%2==0)  return 1;
        else return -1;
}
int sole(int m)
{
        if(m%2==0)  return -1;
```

```cpp
        else return 1;

}

int  main()

{

        int n,chon;

        cout<<"1. SO NGUYEN TO"<<endl;

        cout<<"2. SO CHINH PHUONG"<<endl;

        cout<<"3. SO NGUYEN HOAN TOAN"<<endl;

        cout<<"4. SO CHAN"<<endl;

        cout<<"5. SO LE"<<endl;

        cout<<"6. THOAT CHUONG TRINH"<<endl;



        printf("\n  You must enter a number\n");

        scanf("%d",&n);

        while(getch()!=27)

        {

        printf("\n Ban muon thuc hien hanh dong gi ?");

        scanf("%d",&chon);

        switch(chon)

         {case 1: if((songuyento(n)==1))

                cout<<"\n "<<n<< " la so nguyen to";

                else cout<<"\n "<<n<< " khong la so nguyen to";

                break;
```

```cpp
        case 2: if((sochinhphuong(n)==1))

            cout<<"\n "<<n<< " la so chinh phuong";

            else cout<<"\n "<<n<< " khong la so chinh phuong";

            break;


        case 3: if((songuyenhoantoan(n)==1))

            cout<<"\n "<<n<< " la so nguyen hoan toan";

            else cout<<"\n "<<n<< " khong la so nguyen hoan toan";


            break;

        case 4: if((sochan(n)==1))

            cout<<"\n "<<n<< " la so chan";

            else cout<<"\n "<<n<< " khong la so chan";

            break;

         case 5: if((sole(n)==1))

            cout<<"\n "<<n<< " la so le";

            else cout<<"\n "<<n<< " khong la so le";

            break;

            default: break;

    }

        cout<<"\n Ban muon thoat thi  nhan ESC ";

        cout<<"\n"    ;

}

return  0;
```

}