

If cost price and selling price of an item is input through the keyboard, write a program to determine whether the seller has made profit or incurred loss. Also determine how much profit he made or loss he incurred.

```
#include<iostream>
#include<conio.h>
using namespace std;
int main()
{
    float cp,sp,profit,loss;
    cout<<"Enter cost price : ";
    cin>>cp;
    cout<<"Enter selling price : ";
    cin>>sp;
    if(sp>cp)
    {
        cout<<"profit : "<<sp-cp;
    }
    else
    {
        cout<<"loss : "<<cp-sp;
    }
    getch();
    return 0;
}
```

2. Any year is input through the keyboard. Write a program to determine whether the year is a leap year or not.

```
#include<iostream>
#include<conio.h>
using namespace std;
int main()
{
    int year;
    cout<<"enter year : ";
    cin>>year;

    if(year % 4 == 0 && year % 100 != 100)
    {
        cout<<"leap year";
    }
    else
    {
        cout<<"not leap year ";
    }
}
```

```

    getch();
    return 0;
}

```

3. A five-digit number is entered through the keyboard. Write a program to obtain the reversed number and to determine whether the original and reversed numbers are equal or not.

```

#include<iostream>
#include<conio.h>
using namespace std;
int main()
{
    int n, rev = 0, r;
    cout<<"enter the five digit number : ";
    cin>>n;
    while(n != 0)
    {
        r=n%10;
        rev = rev * 10 +r;
        n /= 10;
    }

    cout<<"revers no. : "<<rev;

    getch();
    return 0;
}

```

4. Write a program to check whether a triangle is valid or not, when the three angles of the triangle are entered through the keyboard. A triangle is valid if the sum of all the three angles is equal to 180 degrees.

```

#include<iostream>
#include<conio.h>
using namespace std;
int main()
{
    int a1,a2,a3,sum;
    cout<<"Enter three angles of triangle : ";
    cin>>a1>>a2>>a3;
    sum=a1+a2+a3;
    if(sum==180)

```

```

    {
        cout<<"All angles of triangle is valid ";
    }
    else
    {
        cout<<"the angle of triangle are not valid \nbecause sum of all angle of
triangle is : "<<sum;
    }
    getch();
    return 0;
}

```

5. If the ages of Ram, Shyam, and Ajay are input through the keyboard, write a program to determine the youngest of the three.

```

#include<iostream>
#include<conio.h>
using namespace std;
int main()
{
    int ram,shyam,ajay;
    cout<<"enter the age of ram,shyam and ajay : ";
    cin>>ram>>shyam>>ajay;
    if(ram>shyam && ram>ajay)
    {
        cout<<"ram is greater ";
    }
    else if(shyam>ram&&shyam>ajay)
    {
        cout<<"shyam is greater ";
    }
    else
    {
        cout<<"ajay is greater";
    }
    getch();
    return 0;
}

```

6. Any character is entered through the keyboard; write a program to determine whether the character entered is a capital letter, a small case letter or a digit.

```

#include<iostream>
#include<conio.h>
using namespace std;
int main()
{
    char c;
    cout<<"enter the charecter : ";
}

```

```
cin>>c;
if(c>48 && c<59)
{
    cout<<"digit";
}
else if(c>65 && c<90)
{
    cout<<"uppercase";
}
else if(c>97 && c<122)
{
    cout<<"lowercase";
}
return 0;
}
```