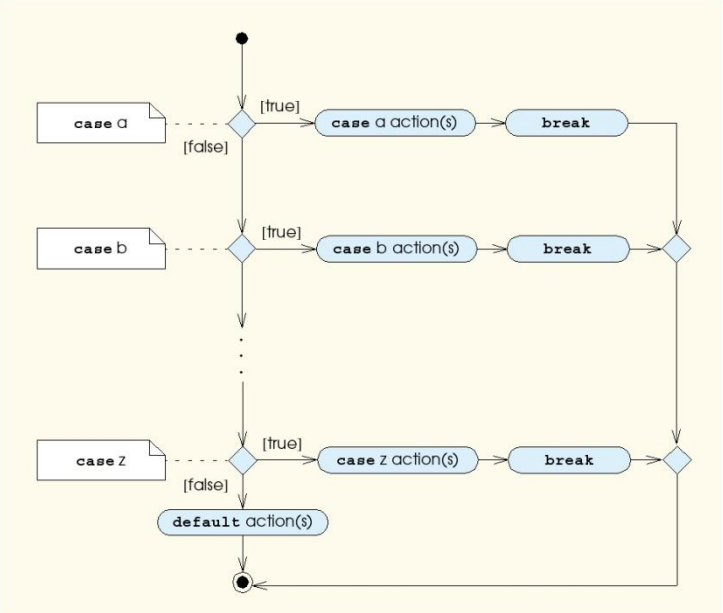

The C++ **SWITCH** statement may be used to select one of several alternatives. The **SWITCH** statement has the general form:

```
switch (expression)
{
    case Label1:
        statement(s)1;
        break;
    case Label2:
        statement(s)2;
        break;
    ... etc. ...
    case Labeln-1:
        statement(s)n-1;
        break;
    default:
        statement(s)n;
        break;
}
```

Note: The keyword **break;** in a switch is very important! If the break is omitted following a statement sequence, then execution will continue, or fall through to the next statement(s). Ordinarily this is undesirable and an error.

switch example	if-else equivalent

switch (x) {
  case 1:
  cout << "x is 1";
  break;
  case 2:
  cout << "x is 2";
  break;
  default:
  cout << "value of x unknown";
  }
	if (x == 1) {
	  cout << "x is 1";
	  }
	else if (x == 2) {
	  cout << "x is 2";
	  }
	else {
	  cout << "value of x unknown";
	  }

1. If one entered number is 1,2 or 3 or NOT

```
#include <iostream>
using namespace std;

int main()
{
int x;
cout<<"Enter x: ";
cin>>x;

switch (x) {
  case 1:
  case 2:
  case 3:
    cout << "x is 1, 2 or 3";
    break;
  default:
    cout << "x is not 1, 2 nor 3";
  }


cin.get(); cin.get();
return 0;
}
```

2. If one entered data is digit, consonant or vowel

```
# include <iostream>
using namespace std;
int main()
{
char znak;
char dane='d';
int smg=0;
int sg=0;
povtori:
cout<<"\nVnesi go znakot od tipot char:";
cin>>znak;
switch (znak)
{
            case ('a'):
            case ('e'):
            case ('i'):
            case ('o'):
            case ('u'):
                        cout<<"\nZnakot "<<znak<<" e samoglaska"<<endl;
                        smg++;
                        break;

            case ('0'):
            case ('1'):
            case ('2'):
            case ('3'):
            case ('4'):
            case ('5'):
            case ('6'):
            case ('7'):
            case ('8'):
```

```
            case ('9'):
                        cout<<"\nZnakot e cifra\n";
                                    break;

            default:
                        cout<<"\nZnakot "<<znak<<" e soglaska"<<endl;
                        sg++;
                        break;
}
cout<<"dali sakas uste"<<endl<<"d/n biraj\n";
cin>>dane;
if (dane=='d') goto povtori;
cout<<"/nBrojot na vnesenite samoglaski e "<<smg<<" , a pa na soglaski e "<<sg<<endl;

cin.get(); cin.get();
return 0;
}
```

3. Entering numbers from 1 to 15, checking and counting if they are odd or even

```
# include <iostream>
using namespace std;
int main()
{
int i, n, broj, b_parni=0,b_neparni=0;
  cout<<" Vnesi priroden broj n:";
  cin>>n;
  i=1;
while (i<=n)
 { cout<<"\n Vnesi go brojot od intervalot [1,15 ] :";
cin>>broj;
switch (broj)
{ case 1:
case  3:
case  5:
case  7:
case  9:
case  11:
case  13:
case  15:b_neparni++;
            i++;
        break;
  case 2:
  case 4:
  case 6:
  case 8:
  case 10:
  case 12:
 case 14:b_parni++;
             i++;
   break;
default: cout<<" \nBrojot ne e vo baraniot interval ";
            i++;
break;}
    }
  cout<<" parni broevi se "<<b_parni<<" i neparni broevi se "<<b_neparni;

cin.get(); cin.get();
return 0;
}
```

4. Entering numbers from 1 to 10, checking and counting how much of them are/aren't in the interval

```
# include <iostream>
using namespace std;
//vnesot se kontrolira so brojot n na prirodni broevi
int main()
{
int i, n, broj,  br_vo=0, br_nevo=0;
  cout<<" Vnesi priroden broj n:";
  cin>>n;
i=1;
while(i<=n)
 { cout<<"\n Vnesi go brojot od intervalot [1,10 ] :";
cin>>broj;
switch (broj)
{ case 1:
case  2:
case  3:
case  4:
case  5:
case  6:
case  7:
case  8:
case 9:

  case 10:
          cout<<"\n brojot e vo baraniot interval";
                              br_vo++;
                              i++;
           break;
default: cout<<" \nBrojot ne e vo baraniot interval ";
        br_nevo++;
                    i++;
        break;}//end switch
   }//end for
cout<<" \n broevi vo baraniot interval se "<<br_vo<<" i koi ne se vo baraniot interval e "<<br_nevo;

cin.get(); cin.get();
return 0;
}
```

5. Here is another example of using **switch**:

```
#include<iostream>
using namespace std;
int main()
{
int size;
cout<<"Enter one integer";
cin>>size;
       switch (size)
          {
               case 6:
               case 7:
               case 8:
               case 9:
               case 101:
                   cout << "big";
                   break;
               case 1:
               case 2:
```

```
            case 3:
                cout << "small";
                break;
            case 4:
            case 5:
                cout << "medium";
                break;
            default:
                cout << "Error";
                break;
        }
        cout << endl;

cin.get();
cin.get();
return 0;
      }
```