Switch statement in C++

General Form:

```
switch (select)
{
  case label1:    stmt1;
                  break;
  case label2:    stmt2;
                  break;

  ...

  case labeln:    stmtn;
                  break;
  default:        stmt;
}
```

Meaning: select is evaluated and then compared in order starting with label1 and proceeding to labeln unless a match is found. If a match is found, then that statement is executed. If no match is found, the default statement is executed. If no default exists and no match is found, none of the statements are executed.

Note1: select must be of an ordinal data type

Note2: Each label must be a single constant or an expression of constant values (no variables are allowed in the expression) and can only exist in one case section.

Note3: Once a match is found, execution begins with the associated statement and continues on until a break is encountered.

Note4: The statements associated with a particular label don't have to be enclosed within braces as the entire switch is treated as a block.

P#1: What is the output of each of the following switch statements?

Switch #1

```
int i,j;

i = 0;
j = 0;

switch (i)
{
   case 0:    j++;
              break;
   case 1:    j++;
              break;
}

cout << j << endl;
```

Switch #2

```
int i,j;

i = 0;
j = 0;

switch (i)
{
   case 0: j++;
   case 1: j++;
}

cout << j << endl;
```

P#2: What will be the results of the running the program segment below and inputting values of 1 and 2 respectively?

```
int x, y, j;
j = 1;

cin >> x >> y;
switch (x > y)
{
  case 0:    j++;
             break;
  case 1:    j--;
             break;
}
cout << j << endl;
```


P#3: Write a program segment that will ask the user what type of vehicle (Car or Truck) they would like to rent and then display how much that rental will cost. A Car rental is $100 per day and a Truck rental is $120 per day. Use a switch statement in your solution. Valid input is C, c, T, t. Print an error message for invalid input.

Would you like to rent a Car or Truck? (C/T): C

A Car costs $100.00 a day