C - nested switch statements

It is possible to have a switch as a part of the statement sequence of an outer switch. Even if the case constants of the inner and outer switch contain common values, no conflicts will arise.

Syntax

The syntax for a **nested switch** statement is as follows −

```
switch(ch1) {

  case 'A':
    printf("This A is part of outer switch" );

    switch(ch2) {
      case 'A':
        printf("This A is part of inner switch" );
        break;
      case 'B': /* case code */
    }

    break;
  case 'B': /* case code */
}
```

Example

Live Demo

```
#include <stdio.h>

int main () {

   /* local variable definition */
```

```
   int a = 100;
   int b = 200;

   switch(a) {

      case 100:
         printf("This is part of outer switch\n", a );

         switch(b) {
            case 200:
               printf("This is part of inner switch\n", a );
         }
   }

   printf("Exact value of a is : %d\n", a );
   printf("Exact value of b is : %d\n", b );

   return 0;
}
```

When the above code is compiled and executed, it produces the following result –

```
This is part of outer switch
This is part of inner switch
Exact value of a is : 100
Exact value of b is : 200
```