

# Emulating Switch

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# The switch Statement in C

```
switch (menu_option) {  
    case 1: single_player();    break;  
    case 2: multi_player();     break;  
    case 3: load_game();        break;  
    case 4: save_game();         break;  
    case 5: reset_high_score(); break;  
    default:  
        printf("No such option!");  
        break;  
}
```

# In Python `if...elif...else` Can Be Clumsy

```
if menu_option == 1:
    single_player()
elif menu_option == 2:
    multi_player()
elif menu_option == 3:
    load_game()
elif menu_option == 4:
    save_game()
elif menu_option == 5:
    reset_high_score()
else:
    print("No such option!");
```

# Demo



There is no switch construct in Python

Option #1 - `if...elif...elif...else`

Option #2 - A mapping of callables

Refactor an adventure game from  
Option #1 to Option #2

**Along the way we'll use `try...else`**

```
kafka.py x
92         "W": go_west,
93         "S": go_south,
94         "L": look,
95         "Q": quit_game,
96     }
97
98     try:
99         command_action = actions[command]
100     except KeyError:
101         print("I don't understand")
102     else:
103         position = command_action(position)
104
105     else: # nobreak
106         print("You have chosen to leave the game.")
107
108     print("Game over")
109
110 play()
```

Run: kafka x

```
There is a tall tower here, with no obvious door. A path leads east.
? N
You fall into a lava pit.
You're dead!
Game over

Process finished with exit code 0
```