Python

{ IF Statements

Violet Cullors

If Statements

- If Then

- If Then Else

- If Elsif Else - Used for the Switch Case

Switch Case – Java example

```java
int month = 3;          String monthString;

switch (month)
 { case 1: monthString = "January";
            break;
   case 2: monthString = "February";
            break;
   case 3: monthString = "March";
             break;
   .

   .

   default: monthString = "Invalid month";
            break;
}
```

Not in Python !!!

A switch case statement is a type of selection control, where the value of the variable or expression changes the control flow of program execution

SYNTAX

if expression(T or F) :
    statement

if condition is TRUE then execute statement

if NUM > 0:
    print ("this number is bigger than zero")

If NUM == 52:
    print ("this number equals 52")

NUM = 52

SYNTAX
if expression(T or F) :
        statement 1
else:
        statement 2

IF condition is TRUE then execute #1
ELSE is FALSE and execute #2

if NUM > 0:
        print ("this number is bigger than zero")
else:
        print ("this number is smaller than zero")

if NUM == 52:
        print ("this number is 52")
else:
        print ("this number is not 52")

NUM = -3

IF condition TRUE execute #1 ELSEIF condition #2
TRUE execute #2 ELSEIF condition #3 TRUE then
execute #3 …… ELSE all FALSE execute #N

```
if NUM => 1000:
    print("Jackpot!")
elif NUM => 800:
    print("Big Money!")
elif NUM => 500:
    print("Lotta Money!")
elif NUM => 250:
    print("Money!")
else:
    print("Grocery Money")
```

SYNTAX
```
if expression(T or F) :
        statement 1
elif expression(T or F) :
        statement 2
elif expression(T or F) :
        statement 3
elif expression(T or F) :
        statement N
else:
        statement N+1
```

Python style – Switch Case

month = 3
String monthString;

if month == 1:
    monthString = "January"
elif month == 2:
    monthString = "February"
elif month == 3:
    monthString = "March"
else:
    monthString = "Invalid month"

JAVA EXAMPLE

```
switch (month)
{ case 1: monthString = "January";
          break;
  case 2: monthString = "February";
          break;
  case 3: monthString = "March";
          break;
  default: monthString = "Invalid month";
          break;
}
```

```python
customer_code = raw_input('Enter customer code (r,c,z): ')
usage  = raw_input('Enter water usage: ')
f_usage = float(usage)

if customer_code == "r":
    bill = 5.0 + (f_usage * .0005)
    bill = round(bill, 2)
elif customer_code == "c":
    bill = 1000.0 + (f_usage * .00025)
    bill = round(bill, 2)
elif customer_code == "z":
    print("End program")
else:
    print("Error in customer code.")

print("***")

if (customer_code == "r" or customer_code == "c"):
    print("Code: " + customer_code)
    print("Gallons of water used: " + str(usage))
    print("Amount billed: " + str(bill))

print("Script complete.")


 if f_usage >500:
     bill = bill + 10.0
```

Try this.

Calculate water bill by customer type