

Python

{ Switch Case Statement = ELSE IF Statements

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Switch Case – Java example

```
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;
}
```

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

If Statements

- ⌘ If Then

- ⌘ If Then Else

- ⌘ If Elsif Else - Used for the Switch Case

IF condition is TRUE Then execute #1

If NUM > 0:

```
print ("this number is bigger than zero")
```

If NUM == 52:

```
print ("this number equals 52")
```

IF condition is TRUE Then execute #1
ELSE condition is FALSE 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")
```

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("Nice Money!")
elif NUM => 250:
    print("Money!")
else:
    print("Grocery Money")
```

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;
}
```


Water bill – calculate by customer type

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

Try this.

Updated waterUsage function

```
## function to return the water usage based on beginning and  
## ending water meter readings take into account if meter numbers  
## roll over to new beginning of 0000000000.  
## last number of meter is in tenths of a gallon equals (use * .10)
```

```
def waterUsage(beg, end):  
    result = int(end) - int(beg)  'changing str type to integer num  
    if result > 0:  
        return result * .10  'turn last number in results to tenths  
    else:  
        result = (10000000000 - beg) + end  
        return result * .10
```