



# Expressions



## The C++ Way:

```
// declare a variable
int age = 37;
// assign a new value to the variable
age = 28;
// examples of some simple expressions
age++; // age is now 29
age = age * 2; // age is now 58
age = age - 13; // age is now 45
```

## The Python Way:

```
# declare a variable
age = 37
# assign a new value to the variable
age = 28
# examples of some simple expressions
age = age * 2 # age is now 56
age = age - 13 # age is now 43
```

Note: No “++” or “--” operator in Python.



# Conditionals & Branching



# If/Else

## The C++ Way:

```
if (age < 50) {  
    std::cout << "Save now for retirement!" << std::endl;  
}  
else {  
    std::cout << "Your AARP membership is in the mail" << std::endl;  
}
```

## The Python Way:

```
if (age < 50):  
    print("Save now for retirement!")  
else:  
    print("Your AARP membership is in the mail")
```



# Indentation is Important!

```
if (age < 50):  
    print("Save now for retirement!")  
else:  
    print("Your AARP membership is in the mail")  
    print("Please look carefully")
```

Is not the same as

```
if (age < 50):  
    print("Save now for retirement!")  
else:  
    print("Your AARP membership is in the mail")  
print("Please look carefully")
```

Whitespace serves the same function as C++'s { }



# If/Elif/Else

## The C++ Way:

```
if (age < 50) {  
    std::cout << "Save now for retirement!" << std::endl;  
}  
else if (age == 50) {  
    std::cout << "Your AARP membership is in the mail" << std::endl;  
}  
else {  
    std::cout << "Enjoy your retirement!" << std::endl;  
}
```

## The Python Way:

```
if (age < 50):  
    print("Save now for retirement!")  
elif (age == 50):  
    print("Your AARP membership is in the mail.")  
else:  
    print("Enjoy your retirement!")
```



# No Switch Statement in Python

- There is a way to implement the same functionality.
  - Look it up if you desire.



# No Constant Expressions

- There is a way to implement the same functionality.
  - Look it up if you desire.