

Project Spartan Guidelines

Declaration

```
// implicit typing
x = 5;

// explicit typing
x (int) = 5;
```

Types

Basic

```
int x;
float x;
str x;
bool x;
```

Complex

```
vector x;
enum X;
struct X;
```

Operations

Basic

```
x = 5 + 5;
x = 5 - 5;
x = 5 * 5;
x = 5 / 5;

x = 5 % 5;
x = 5**5;
```

Complex

```
print(x);  
  
ceil(x);  
  
floor(x);
```

Functions

```
// no return type  
foo(int x) {  
  
}  
  
// return type  
string bar(int x) {  
  
}
```

Logic

Loops

```
// normal while loop  
while (condition) {  
  
}  
  
// loops 10 times, i counts from 0 to 9  
for (i, 10) {  
  
}  
  
// i is pre-declared  
for (i != 0; i--) {  
  
}  
  
// i is not pre-declared  
for (int i = 9; i != 0; i--) {  
  
}
```

If Logic

```
if (condition) {  
  
}
```