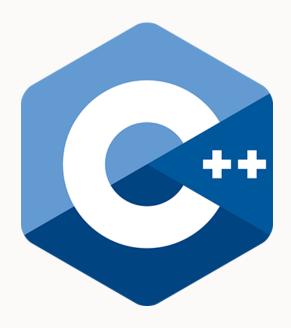
## CS106B: C++

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## Class notes

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## 1 Basic knowledge

Type

```
1. int a; Declear a new integer variable
```

- 2. char b = x b is a char
- 3. double d = 1.05 d is a double, a type used to represent decimal numbers
- 4. Cannot redefine a variable to be another type!
- 5. Do not need the type when re-assigning a variable!
- Anatomy of a function (Only return one type and one value.)

```
returnType functionName(varType parameter1, varType parameter2, ...);

returnType functionName(varType parameter1, varType parameter2, ...) {}

returnType variable =/* Some fancy code. */

/* Some more code to actually do thongs. */

return variable;
}
```

• Function Example (A function must always be defined before it is called.)

```
double average(double a, double b) { //parameter
  double sum= a + b;
  return sum / 2; //return value
```

```
int main() {
  double mid= average(10.6, 7.2); //arguments
  dout << mid << endl;
  return 0;
}</pre>
```

## Common string methods

- 1. s.append(str): add text str to the end of a string
- 2. s.replace(index, len, str): replaces len char at index with text str
- 3. s.substr(start, length): the next length characters beginning at start(inclusive); If length ommitted, grabs till end of string
- 4. C string have no methods, this is why you cannot do something like "hi".length() in C++. Beware of C string!! (C string is like a word in "")
- 5. string("text") converts the C string into a C++ string
- **6.** string.c\_str() return a C string from a C++ string