



CSE 3302

Programming Languages

Control II

Procedures and Environments

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Procedures vs. Functions



- Function:
 - no side effect
 - return a value
 - Function call: expression
- Procedure:
 - side effect, executed for it
 - no return value
 - Procedure call: statement
- No clear distinction made in most languages
 - C/C++: void
 - Ada/FORTRAN/Pascal: procedure/function

Syntax



- Terminology:
 - body
 - specification interface
 - name
 - type of return value
 - parameters (names and types)

```
int f(int y); //declaration

int f(int y) {
    int x;
    x=y+1;
    return x;
}

int f(int y){ //definition
    int x;
    x=y+1;
    return x;
}
```