EECS 2031

Conditional Statements

Boolean expressions

- False is 0, any thing else is 1

Limits

- The file limits.h provides some constants
- char- `CHAR_BIT, CHAR_MIN, CHAR_MAX, SCHAR_MIN, …`
- int `INT_MIN, INT_MAX, UINT_MAX`
- long `LONG_MIN, …`
- You can find `FLT_MIN, DBL_MIN`, … in `<float.h>`

Control Flow

- if, while, do while
- The execution of the program depends on some conditions
- Similar to Java

Control Flow

- **if** (expression)
- *statement*
- **else**
- *statement*
- else is optional
- What is statement?

```
; // null statement

x=a+b;

{
    …….
}

{
  …
    {
    …….
    }
}
```

Control Flow

- **if** (expression)
- *statement1;*
- **else if** (expression)
- *statement2;*
- **else if** *(expression)*
- *statement3;*
- **else**
- *statement4;*

- **if** (expression)
- *statement1;*
- **if** (expression)
- *statement2;*
- **else**
- *statement4;*

Conditional experssions

- `Test?  exper-true:expe-false`
- `z=(a>b)?  a:b`

Switch

```
switch(x)  {
    case 0 : ……
          break;
    case 1 : ……
          break;
}
```

Unique cases, no duplication

Switch (expression) not allowed

While

- while `(expression)`
- `  statement`

- `do`
- `  statement`
- while`(expression)`

For

- for(i=0, j=3; i<10 && k>2; i++,j--)
- statement
- for(;;)

Break and Continue

- Break – exits the innermost loop
- Continue – skips the current iteration and starts the next one