

# Scope Rules

## 1. Scope Rules for Variables

A variable is known only inside the block that it was declared in. A block is bracketed by { ... }

```
// This program demonstrates the scope rule for a variable
// A variable is known only inside the block that it was declared in

int x;

int main () {

    x = -35;
    printf("This x is %i\n",x);

    int x;
    x = 4;
    printf("This x is %i\n",x);

    if (x < 7){
        int x;
        x = 16;
        printf("This x is %i\n",x);
    }

    printf("This x is %i\n",x);

    return 0;
}
```

Sample output:

```
This x is -35
This x is 4
This x is 16
This x is 4
```