Get data
Main
Welcome()
GetData()
num
answer
Math
Calculate
Returns the answer
Get data
Prompt
Read
Returns the data
Welcome()

slide 50

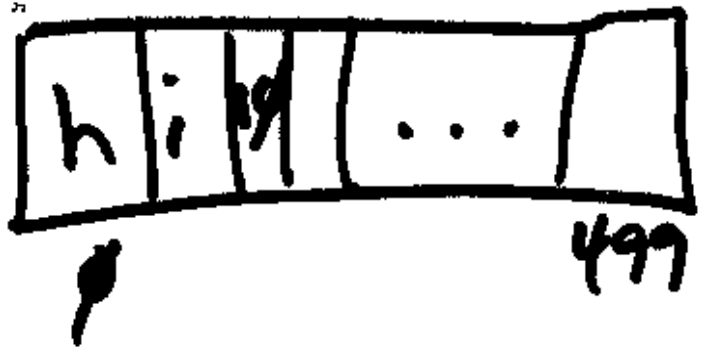
cstring

strcpy (name, name2);

int len;

len = strlen(array); //cstring

(2)



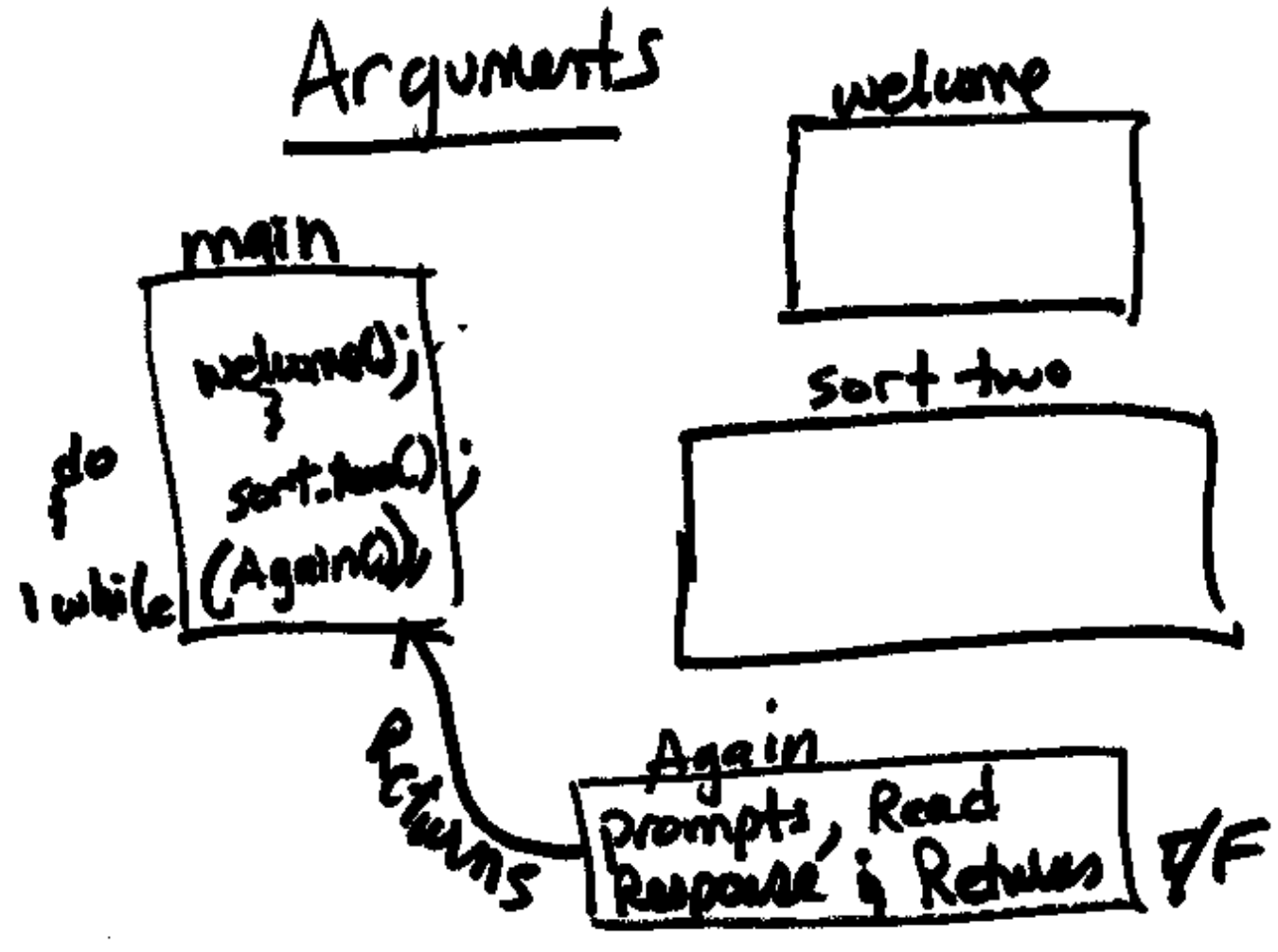
Main for slide 52

```
#include <cstring>
#include <iostream>
using namespace std;
void welcome();
void sort_two();  // prototype

int main()
{
    welcome();  // describe how the program works

    sort_two();  <-- FUNCTION CALL
    return 0;
}
```

Many times

```
int main()
{   char response;
    welcome();
    do
    {
        sort_two();
        cout << "Do you want to do
                this again? ";
        cin >> response;
        cin.get();
    } while (response == 'y');
    return 0;
}
```

Arguments


welcome
main
welcome();
sort_two();
do
while (Again());
sort_two
Again
prompts, Read Response & Returns T/F
returns

```
float get_data(); //prototype
```

```
float get_data()
{
    float inches;
    cout << "please enter ... ";
    cin >> inches; cin.get();
    while (inches <= 0)
    {
        cout << "Error ";
        cin >> inches; cin.get();
    }
    return inches;
}
```

```
//prototype
float Calculate(float inches);
```

arguments

```
float calculate(float inches)
{   float answer;
    answer = 25.4 * inches;
    return answer;
}
```

Pass by VALUE

main

float mm;
float inches;
float temp;

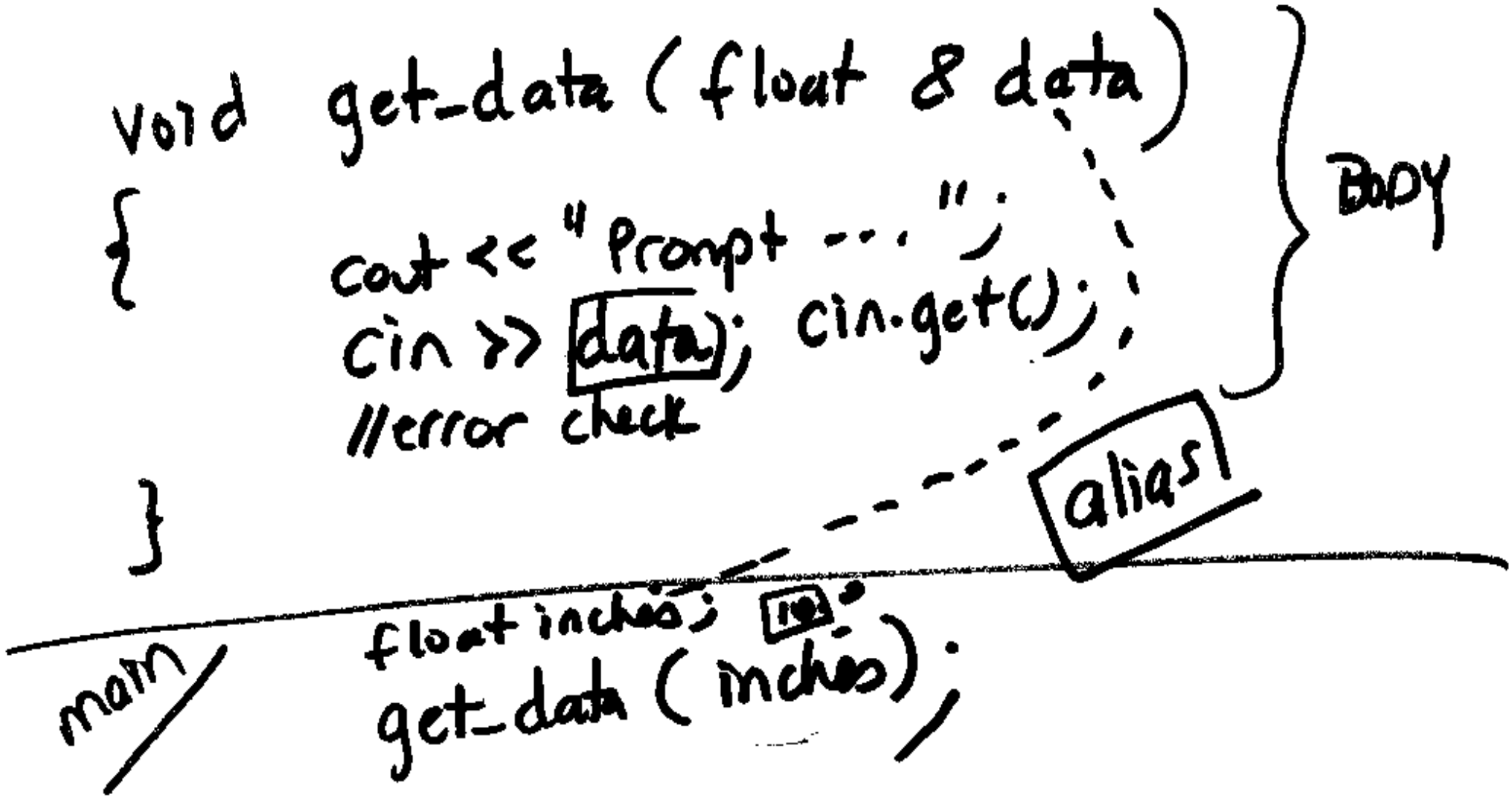
LOCAL

welcome();

temp = get_data();

mm = calculate(temp);

}


void get_data (float & data)
{
cout << "Prompt ...";
cin >> data; cin.get();
//error check
}
BODY
alias
main
float inches; 192
get_data (inches);

Alternate

Pass by Reference

```
void get_data(float &data);
```

`&` → Pass by reference

`data` → skipped

NO Copies

```
void calculate(float inches, float &mm);
```

`float inches` → Pass by value

`float &mm` → by reference

```
void calculate (float inches, float &mm)
{
    mm = 25.4 * in;
}
```

in = 200;

100 — in

---

main

calculate (inches, mm);

ch = toupper(ch);