

Possible errors:

character not for c  
if not, then return -1000

if Input float is invalid (less than -273C or  
— F)

return -1000

if char = c  
convert F temp to C temp ~~return~~  
else convert C temp to F temp, ~~return~~

return temp

Slide 49:

①

ClassAverage

Compute class average of exactly 10 students

Objective

Design a function →

Input: float &amp; character (c or f)

Output: float

Purpose: convert the input number to celsius or Fahrenheit. Assume input is the ~~char~~ ~~if~~ if the char is c, then Fahrenheit is the input number. output the temp in C.

From the student examples:

- \* Some did code
- \* Some did error detection
- \* No one did everything

;Grade Calculator

; Purpose:

; This algorithm calculates the average  
; of 10 grades.

```
float temp Convert(float input, char convType)
{
    float output;
    if (convType == 'C')
    {
        output = (input - 32) * 5/9;
    }
    else if (convType == 'F')
    {
        output = input * 9/5 + 32;
    }
    else
    {
        printf("invalid conversion type.");
    }
    return output;
}
```

float Convert\_temp(float, char) {

if input character equals c then  
    convert float number to fahrenheit  
else if input character is f then  
    convert float number to celsius  
else input invalid for character  
    float stays the same  
return new float value



// Temperature Converter (float, char)  
// a temperature of type float will be inserted  
// into the call function and dependant upon the  
// char choice (C - or - F) Celsius ~~or~~ Fahrenheit  
// will be returned

if the char is 'C' then

return conversion of float to Celsius

if the char is 'F' then

return conversion of float to Fahrenheit