```c
/*  HOMEWORK 2.2
    lowpower.c:
    Prompts the user for a VOLTAGE (float) & RESISTANCE (float).
    Calculates POWER (float):
        P = V^2 / R
    If POWER EXCEEDS MAX_POWER (0.25) W, print error & start over.
    Else print calculated POWER.
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    February 5, 2016    */

#define _CRT_SECURE_NO_WARNINGS // allow scanf on Windows
#include <stdio.h>
#include <stdlib.h>
#include <math.h>

const float MAX_POWER = 0.25;   // Watts of MAX POWER allowed (0.25 in assignment
    spec)

// A few quotes from 2001: Space Odyssey to throw at the user for entering bad values
const char *QUOTES[6] = {
    "I'm sorry, Dave. I'm afraid I can't do that.",
    "I think you know what the problem is just as well as I do.",
    "This mission is too important for me to allow you to jeopardize it.",
    "I know that you and Frank were planning to fry me, and I'm afraid that's
something I cannot allow to happen.",
    "Daisy, Daisy, give me your answer do.",
    "Dave, this conversation can serve no purpose anymore. Goodbye."
};

// Declare input function
float getFloat(const char *prompt);

int main(int argc, char** argv)
{
    float voltage = 0.0;    // store input voltage
    float resistance = 0.0; // store input resistance
    float power = 0.0;      // store calculated power = voltage^2 / resistance
    int quote = 0;          // quote "counter"

    // Print introduction to user
    printf("Good afternoon, Dave. I am a HAL 9000 computer. I am afraid my power
needs adjusting.\n");

    /*  Loop indefinitely if power is a "bad value":
        less than zero or greater than MAX_POWER    */
    while (power <= 0 || power > MAX_POWER) {
        // Print instructions
        printf("Please specify a new voltage and resistance, Dave.\n");
        printf("I cannot handle more than %0.2f Watts of power, Dave.\n", MAX_POWER);
```

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        /*  Input loop: keep prompting user for voltage, then
             resistance, each until reasonable value entered.   */
        do {
            voltage = getFloat("Voltage: ");
        } while (voltage <= 0);
        do {
            resistance = getFloat("Resistance: ");
        } while (resistance <= 0);

        //  Calculate the power:    power = voltage ^2 / resistance
        power = (float)(pow(voltage, 2)) / resistance;

        //  Cannot exceed MAX_POWER!
        if (power > MAX_POWER)
        {
            printf("\a\a\aPower limit exceeded! %s\n\n", QUOTES[quote]);
            quote++;
            // Give the user 6 tries, then give up (exit with an error)
            if (quote == 6) exit(1);
        }
    }

    // Print positive feedback and result
    printf("\nVery good, Dave. That will be %0.2f Watts of power. Have a nice
day!\n", power);

    return 0;   // We shouldn't have an error
}

/*  getFloat
    argument:   prompt (const char *)
                string to prompt the user
    return:     user input converted to float   */
float getFloat(const char *prompt)
{
    float myFloat = 0;  // float to return

    printf("%s", prompt);   // Display the prompt
    scanf("%f", &myFloat);  // request input

    return myFloat;         // return integer
}
```