```c
#include <stdio.h>
#include <math.h>

double calculate_diffraction_angle(double wavelength_nm, double slit_width_um) {
    double wavelength_m = wavelength_nm * 1e-9;
    double slit_width_m = slit_width_um * 1e-6;
    double sin_theta = wavelength_m / slit_width_m;

    if (sin_theta > 1.0 || sin_theta < -1.0) {
        return NAN;
    }

    double theta_rad = asin(sin_theta);
    return theta_rad * 180.0 / M_PI;
}

int main() {
    double wavelength_nm;
    double a_values[3];
    double angles[3];
    double max_angle = -1.0;
    double max_a = 0.0;
    int i;

    while (1) {
        printf("Enter the wavelength (380-750 nm): ");
        if (scanf("%lf", &wavelength_nm) != 1) {
            printf("Invalid input. Please enter a number.\n");
            while (getchar() != '\n');
            continue;
        }

        if (wavelength_nm >= 380 && wavelength_nm <= 750) {
            break;
        } else {
            printf("Out of range. Please enter a valid number.\n");
        }
    }

    for (i = 0; i < 3; i++) {
        while (1) {
            printf("Enter slit width a%d (µm): ", i + 1);
            if (scanf("%lf", &a_values[i]) != 1) {
                printf("Invalid input. Please enter a number.\n");
```

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            while (getchar() != '\n');
            continue;
        }
        break;
    }
}

for (i = 0; i < 3; i++) {
    angles[i] = calculate_diffraction_angle(wavelength_nm, a_values[i]);
    if (!isnan(angles[i]) && angles[i] > max_angle) {
        max_angle = angles[i];
        max_a = a_values[i];
    }
}

if (max_angle != -1.0) {
    printf("The slit with width %.2lf µm bent the light the most, with an angle of %.2lf degrees.\n", max_a, max_angle);
} else {
    printf("Invalid slit width(s) provided. No valid diffraction angle could be calculated.\n");
}

return 0;
}
```