Lab 05- Q3

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

#define PI 3.14159265

int main() {
    double a, b, c, alpha;

    // Input side lengths and angle in degrees
    printf("Enter the length of side b: ");
    scanf("%lf", &b);

    printf("Enter the length of side c: ");
    scanf("%lf", &c);

    printf("Enter the angle alpha in degrees: ");
    scanf("%lf", &alpha);

    // Convert angle from degrees to radians
    alpha = alpha * PI / 180.0;

    // Calculate the length of side a
    a = sqrt(pow(b, 2) + pow(c, 2) - 2 * b * c * cos(alpha));

    // Output the result
    printf("The length of side a is: %lf\n", a);

    return 0;
}
```

```
Enter the length of side b: 8
Enter the length of side c: 6
Enter the angle alpha in degrees: 90
The length of side a is: 10.000000

----------------------------------
Process exited after 14.18 seconds with return value 0
Press any key to continue . . .
```