

Zac Robbins  
[zrobbins@my.athens.edu](mailto:zrobbins@my.athens.edu)  
00100125  
CS317 – Asg5

### Problem 1

Negative Radius:

```
Microsoft Visual Studio Debug Console
Geometry Calculator

1. Calculate the Area of a Circle
2. Calculate the Area of a Rectangle
3. Calculate the Area of a Triangle
4. Quit

Enter your choice (1-4): 1
Please enter the radius of the circle:
-3
The radius cannot be negative.
C:\Users\newuser\OneDrive\Documents\Athens State\CS317\RobbinsAsg5\Debug\RobbinsAsg5.exe (process 868) exited with code 0.
Press any key to close this window . . .
```

Correct radius:

```
Microsoft Visual Studio Debug Console
Geometry Calculator

1. Calculate the Area of a Circle
2. Calculate the Area of a Rectangle
3. Calculate the Area of a Triangle
4. Quit

Enter your choice (1-4): 1
Please enter the radius of the circle:
4
The area of this circle is: 50.2654

C:\Users\newuser\OneDrive\Documents\Athens State\CS317\RobbinsAsg5\Debug\RobbinsAsg5.exe (process 18480) exited with code 0.
Press any key to close this window . . .
```

Zac Robbins  
[zrobbins@my.athens.edu](mailto:zrobbins@my.athens.edu)  
00100125  
CS317 – Asg5

Negative Length or Width:

Microsoft Visual Studio Debug Console

Geometry Calculator

1. Calculate the Area of a Circle
2. Calculate the Area of a Rectangle
3. Calculate the Area of a Triangle
4. Quit

Enter your choice (1-4): 2

Please enter the length of the rectangle, followed by the width:

3 -5

The length or width cannot be negative numbers.

C:\Users\newuser\OneDrive\Documents\Athens State\CS317\RobbinsAsg5\Debug\RobbinsAsg5.exe (process 6844) exited with code 0.

Press any key to close this window . . .

Correct Length and Width:

Microsoft Visual Studio Debug Console

Geometry Calculator

1. Calculate the Area of a Circle
2. Calculate the Area of a Rectangle
3. Calculate the Area of a Triangle
4. Quit

Enter your choice (1-4): 2

Please enter the length of the rectangle, followed by the width:

3 5

The area of this rectangle is: 15

C:\Users\newuser\OneDrive\Documents\Athens State\CS317\RobbinsAsg5\Debug\RobbinsAsg5.exe (process 2160) exited with code 0.

Press any key to close this window . . .

Zac Robbins  
[zrobbins@my.athens.edu](mailto:zrobbins@my.athens.edu)  
00100125  
CS317 – Asg5

Negative Base or Height:

Microsoft Visual Studio Debug Console

Geometry Calculator

1. Calculate the Area of a Circle
2. Calculate the Area of a Rectangle
3. Calculate the Area of a Triangle
4. Quit

Enter your choice (1-4): 3

Please enter the length of the base of the triangle, followed by the height of the triangle:

-2 3

The base or height cannot be negative.

C:\Users\newuser\OneDrive\Documents\Athens State\CS317\RobbinsAsg5\Debug\RobbinsAsg5.exe (process 13704) exited with code 0.

Press any key to close this window . . .

Correct Base and Height:

Microsoft Visual Studio Debug Console

Geometry Calculator

1. Calculate the Area of a Circle
2. Calculate the Area of a Rectangle
3. Calculate the Area of a Triangle
4. Quit

Enter your choice (1-4): 3

Please enter the length of the base of the triangle, followed by the height of the triangle:

3 2


The area of this triangle is: 3

C:\Users\newuser\OneDrive\Documents\Athens State\CS317\RobbinsAsg5\Debug\RobbinsAsg5.exe (process 14940) exited with code 0.

Press any key to close this window . . .

Zac Robbins  
[zrobbins@my.athens.edu](mailto:zrobbins@my.athens.edu)  
00100125  
CS317 – Asg5

Choice 4:

 Microsoft Visual Studio Debug Console


Geometry Calculator

1. Calculate the Area of a Circle
2. Calculate the Area of a Rectangle
3. Calculate the Area of a Triangle
4. Quit

Enter your choice (1-4): 4

C:\Users\newuser\OneDrive\Documents\Athens State\CS317\RobbinsAsg5\Debug\RobbinsAsg5.exe (process 19500) exited with code 0.  
Press any key to close this window . . .

Invalid Menu Choice:

 Microsoft Visual Studio Debug Console

Geometry Calculator

1. Calculate the Area of a Circle
2. Calculate the Area of a Rectangle
3. Calculate the Area of a Triangle
4. Quit

Enter your choice (1-4): 7


You did not enter a number within the range of 1 through 4.

C:\Users\newuser\OneDrive\Documents\Athens State\CS317\RobbinsAsg5\Debug\RobbinsAsg5.exe (process 23340) exited with code 0.  
Press any key to close this window . . .

Zac Robbins  
[zrobbins@my.athens.edu](mailto:zrobbins@my.athens.edu)  
00100125  
CS317 – Asg5

## Problem 2

Option 1:


 Microsoft Visual Studio Debug Console

```
Welcome to learning basic Spanish!
Please select the phrase you would like to learn today from the following choices:

1. Good morning.
2. Good evening.
3. Nice to meet you.
4. I am sorry.
5. I do not understand.
6. Quit.

Enter your choice (1-6): 1
Buenos dias.
C:\Users\newuser\OneDrive\Documents\Athens State\CS317\Project1\Debug\Project1.exe (process 23440) exited with code 0.
Press any key to close this window . . .
```

Option 2:

 Microsoft Visual Studio Debug Console


```
Welcome to learning basic Spanish!
Please select the phrase you would like to learn today from the following choices:

1. Good morning.
2. Good evening.
3. Nice to meet you.
4. I am sorry.
5. I do not understand.
6. Quit.

Enter your choice (1-6): 2
Buenas noches.
C:\Users\newuser\OneDrive\Documents\Athens State\CS317\Project1\Debug\Project1.exe (process 8280) exited with code 0.
Press any key to close this window . . .
```

Zac Robbins  
[zrobbins@my.athens.edu](mailto:zrobbins@my.athens.edu)  
00100125  
CS317 – A5g5

Option 3:


 Microsoft Visual Studio Debug Console

```
Welcome to learning basic Spanish!
Please select the phrase you would like to learn today from the following choices:

    1. Good morning.
    2. Good evening.
    3. Nice to meet you.
    4. I am sorry.
    5. I do not understand.
    6. Quit.

Enter your choice (1-6): 3
Mucho gusto.
C:\Users\newuser\OneDrive\Documents\Athens State\CS317\Project1\Debug\Project1.exe (process 13280) exited with code 0.
Press any key to close this window . . .
```

Option 4:

 Microsoft Visual Studio Debug Console


```
Welcome to learning basic Spanish!
Please select the phrase you would like to learn today from the following choices:

    1. Good morning.
    2. Good evening.
    3. Nice to meet you.
    4. I am sorry.
    5. I do not understand.
    6. Quit.

Enter your choice (1-6): 4
Lo siento.
C:\Users\newuser\OneDrive\Documents\Athens State\CS317\Project1\Debug\Project1.exe (process 20324) exited with code 0.
Press any key to close this window . . .
```

Zac Robbins  
[zrobbins@my.athens.edu](mailto:zrobbins@my.athens.edu)  
00100125  
CS317 – Asg5

#### Option 5:


 Microsoft Visual Studio Debug Console

```
Welcome to learning basic Spanish!
Please select the phrase you would like to learn today from the following choices:

1. Good morning.
2. Good evening.
3. Nice to meet you.
4. I am sorry.
5. I do not understand.
6. Quit.

Enter your choice (1-6): 5
Yo no comprendo.
C:\Users\newuser\OneDrive\Documents\Athens State\CS317\Project1\Debug\Project1.exe (process 12356) exited with code 0.
Press any key to close this window . . .
```

#### Option 6:

 Microsoft Visual Studio Debug Console


```
Welcome to learning basic Spanish!
Please select the phrase you would like to learn today from the following choices:

1. Good morning.
2. Good evening.
3. Nice to meet you.
4. I am sorry.
5. I do not understand.
6. Quit.

Enter your choice (1-6): 6
C:\Users\newuser\OneDrive\Documents\Athens State\CS317\Project1\Debug\Project1.exe (process 13408) exited with code 0.
Press any key to close this window . . .
```

Zac Robbins  
[zrobbins@my.athens.edu](mailto:zrobbins@my.athens.edu)  
00100125  
CS317 – A5g5

Incorrect Menu Option:

 Microsoft Visual Studio Debug Console

```
Welcome to learning basic Spanish!
Please select the phrase you would like to learn today from the following choices:

1. Good morning.
2. Good evening.
3. Nice to meet you.
4. I am sorry.
5. I do not understand.
6. Quit.

Enter your choice (1-6): 9
You did not enter a number in the range of 1 through 6.
C:\Users\newuser\OneDrive\Documents\Athens State\CS317\Project1\Debug\Project1.exe (process 15268) exited with code 0.
Press any key to close this window . . .
```

### Problem 3

The problem with the given code is that the *testScore* variable is a double. Switch statements can only be used on variables with an integer data type or an expression with an integer value.

The case statements are also incorrect because case statements cannot contain a variable or a variable expression. They must instead contain an integer literal or a constant.