Test cases

Requirements

1. Three triangle’s sides inputted to the console by “Enter”.
2. Sides are numbers, not strings.
3. Each side should be a positive number.
4. One triangle’s side should be less than sum of the other triangle’s side.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | Summary | Steps | Test’s results | Pass/Fail |
| 1. | Checking string value.  (negative?) | 1. Run the application 2. Input int value > 0 3. Input the other int value >0(unequal to the first value.) 4. Input value with string 5. Repeat 1-3 steps and input third int value > 0. 6. Press any key. | 1. Console with “Please, enter triangle;s side.” will appear. 2. Inputted int value will appear on the console. 3. Second inputted int value will appear on the console. 4. Console with "Only numbers are needed. Please enter them." will appear. 5. 3 inputted int values will appear on the console. And text“The triangle is simple” is appeared . Then message “Press any key to exit will appear.” 6. The console will be closed. | Pass |
| 2. | Checking negative value.  (negative) | 1. Input two positive sides. 2. Input value <0 | 1. Values will appear on the console. 2. Message “Triangle’s side should be positive. Try enter valid data.” | Pass |
| 3. | Checking zero values.  (negative) | 1. Input 3 zero values by Enter | 1. Message “Triangle’s side should be positive. Try enter valid data.” | Pass |
| 4. | Checking positive equal values.  (positive) | 1.Input 3equal int values by Enter. | 1. Message “The triangle is equaliteral” is appeared. Then message “Press any key to exit.” | Pass |
| 5 | Checking for isosceles.  (positive) | 1. Input 2 equal int values by Enter 2. Input third value unequal to the first values. | 1. The first 2 values will appear on the console. 2. After appearance of third value on the console, Message “The triangle is isosceles.” is appeared. Then message “Press any key to exit.” | Pass |
| 6. | Checking for isosceles  (Positive) | 1. Input 2 equal int values by Enter 2. Input third value that differs by 10e-6(ex. 2 and 2,000001 ) | 1. The first 2 values will appear on the console. 2. After appearance of third value on the console, Message “The triangle is isosceles.” is appeared. Then message “Press any key to exit.” | Pass |
| 7. | Checking for little difference between numbers.  (negative) | 1. Input 2 equal int values by Enter 2. Input third value that differs by 10e-16 | 1. The first 2 values will appear on the console. 2. After appearance of third value on the console, Message “The triangle is equaliteral.” is appeared. Then message “Press any key to exit.” Will appear. | Pass |
| 8. | Checking the triangle’s existence.  (negative) | 1. Input 2 equal int values by Enter 2. Input third value that is more than sum of two first values(ex. first values: 2 and 3, third: 7(>2+3)) | 1. The first 2 values will appear on the console. 2. Message “Triangle doesn’t exist. Try input right numbers.” is appeared. Then message “Press any key to exit.” will appear. | Pass |
| 9. | Checking input by Enter(positive) | 1. Input numbers by Enter | 1. After each Enter console with “Please, enter triangle;s side.” will appear. | Pass |
| 10. | Checking input by Space(negative) | 1. Run the application  2.Input numbers by Space  3. Press Enter.  4.Input other two int values. | 1. Console with “Please, enter triangle;s side.” will appear 2. Numbers will appear on the console divided by space. 3. Console with “Please, enter triangle;s side.” will appear again. 4. Values is appeared on the console. And message "Triangle doesn't exist.Try enter right numbers." will appear. | Pass |
| 11. | Checking max double value  (negative) | 1. Run the application 2. Input the 1.8e308 | 1. Console with “Please, enter triangle;s side.” will appear 2. Console with "Only numbers are needed. Please enter them." will appear. | Pass |
| 12. | Checking input of 4 numbers instead of 3.  (negative) | 1. Run the application 2. Input int value > 0 3. Input the other int value >0(unequal to the first value.) 4. Input third value. 5. Try to input fourth value. | 1. Console with “Please, enter triangle;s side.” will appear. 2. Inputted int value will appear on the console. 3. Second inputted int value will appear on the console. 4. Third int value will appear on the console. 5. There is no field to input number. Console outputs the type of triangle. | Pass |
| 13. | Checking symbol ’.’ in double value.  (negative) | 1. Run the application 2. Input double value with ‘.’(ex. 2.9 ) | 1. Console with “Please, enter triangle;s side.” will appear. 2. Console with "Only numbers are needed. Please enter them." will appear. | Pass |
| 14. | Checking value closed to zero  (negative) | 1. Run the application 2. Input 3 double values closed to zero. Difference between zero and the numbers is about 1e-325 | 1. Console with “Please, enter triangle;s side.” will appear. 2. After appearance of 3 values message “Triangle’s sides should be positive. Try to enter valid numbers.” | Pass |
| 15. |  |  |  |  |