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| Author: | Yuliya Valadzko | OS: | Windows 10  64-bit | Hardware: | Intel(R) Core (TM) i5-6200  Intel(R) HD Graphics 520 |
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| TC ID | Priority | Title | Preconditions | Steps | Expected results |
| Tc1 | smoke | Check for the existence of the triangle. | 1. Open project.  2. Launch project.  1. Open project.  2. Launch project. | 1.In the pop-up window enter  three different double positive numbers and the sum of two of them should be less than the third number (e. g. 0,5; 0,7; 1,3).  2. Press Enter. | 1. The message appears that a triangle with such sides does not exist. |
| Tc2 | smoke | Check for the existence of the  **equilateral** triangle. | 1.In the window enter  three identical double numbers (e. g. 0,5; 0,5; 0,5).  2. Press Enter. | 1. A message appears that the triangle is equilateral. |
| Tc3 | smoke | Check that the triangle is  **isosceles**. | 1.In the window enter  three double numbers two of which are identical (e. g. 0,7; 0,5; 0,5).  2. Press Enter. | 1. A message should appear that the triangle is isosceles. |
| Tc4 | smoke | Check that the triangle is  **versatile**. | 1. In the window enter  three various double numbers (e. g. 0,7; 0,5; 1,1).  2. Press Enter. | 1. A message appears that the triangle is versatile. |
| Tc5 | smoke | The behavior of the program in case when the user **did not enter the value** of the side of the triangle. | 1. After opening the window  press Enter. | 1. A message appears that the entered value is incorrect.  2. It is possible to enter the correct value. |
| Tc6 | smoke | **Entering** **0** as a side of the triangle. | 1.After opening the window  Enter “ 0 ” .  2. Press Enter. | 1. A message appears that this is a wrong value for the side.  2. It is possible to enter the correct value of the side. |
| Tc7 | smoke | **Entering a negative number** as a side of the triangle. | 1. In the pop-up window enter some negative number from -∞ to 5e-324-1e-15 (e. g. -0,7).  2. Press Enter. | 1. A message appears that this is a wrong value for side cause value < 0.  2. It is possible to enter the correct value of the side. |
| Tc8 | smoke | A value of the side of triangle is the same as **Border condition** . | 1. In the pop-up window enter a number from 1,7e+308 to +∞ (e.g. 1,8e+309.)  2. Press Enter. | 1. A message appears that the value is invalid.  2. It is possible to enter the correct value of the side. |
| Tc9 | smoke | A value of the side of triangle is the same as **Border condition** . | 1. In the pop-up window enter a number from 1,7e+308+1e-15 to +∞ (e.g. 1,8e+309).  2. Press Enter. | 1. A message appears that this is invalid value.  2. It is possible to enter the correct value of the side. |
| Tc10 | smoke | A value of the side of triangle is the same as **Border condition** . | 1. In the pop-up window enter the number: 1,7e+308.  2. Press Enter. | 1. This value is valid.  There is an opportunity to enter the second side of the figure. |
| Tc11 | smoke | A value of the side of triangle is the same as **Border condition** . | 1. In the pop-up window enter a number from 5e-324 to 10e-1 (e.g. -9,8)  2. Press Enter. | The same result as in Tc7. |
| Tc12 | smoke | A value of the side of triangle is the same as **Border condition** . | 1. In the pop-up window enter a number from 1.0 to 1,7e+308 (e.g. 9,8).  2. Press Enter. | The same result as in Tc10. |
| Tc13 | smoke | A value of the side of triangle is the same as **Border condition** . | 1. In the pop-up window enter the number 5e-324 – 1e-15  2. Press Enter. | The same result as in Tc7. |
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| Double | | Double : [ 5e-324 ; 1,7e+308] | | |
| Neg: | (-∞ ; 5e-324) | | Border conditions : | |
| Pos: | [ 5e-324 ; 10e-1] | | Pos: | 5e-324 ; 1,7e+308 ; 0 ; |
| Pos: | 0 | |
| Pos: | [1.0 ; 1,7e+308] | | Neg: | 5e-324 – 1e-15 ; 1,8e+308 ; |
| Neg: | (1,7e+308 ; +∞) | |