BASIC TESTING OF ALGORITHM FUNCTIONS

Test Suite

TS0001

BASIC OPERATION OF SORTING ALGORITHM **(TS0001)**

Author: DenisDennisov	**Spec ID:** TP0001	**Priority:** 1	**Producer:** DenisDennisov	**Developer:** DenisDennisov
OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** 3, C, K;				

Revision History

Date	***Version***	***Description***	***Author***
02.09.2024	1.0 Alpha	Created a test suite #TS0001	DenisDennisov

BASIC OPERATION OF SORTING ALGORITHM **(TS0001)**

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OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** З, С, К;				

TC ID/Priority	**TCBS0001**	**1**
IDEA: Basic colors sorting **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** С, С, З, С, К, З, З, З, К, К, С, З, С, С, К, З **2. Color order:** З, С, К		
Revision History		
Created on: 04.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		
PROCEDURE	**EXPECTED RESULT**	
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter the array of colors separated by a space without signs (С С З С К З З З К К С З С С К З). 3. In the second value (Enter colors order (separated by a space)), enter the order of colors separated by a space without signs (З С К), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Sorted array of colors in the given order (З, З, З, З, З, З, С, С, С, С, С, С, К, К, К, К).	

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OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** 3, C, K;				

TC ID/Priority	**TCBS0002**	**2**
IDEA: Empty colors array sorting **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** ( ) **2. Color order:** 3, C, K		
Revision History		
Created on: 04.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		

PROCEDURE	**EXPECTED RESULT**
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter an empty array of colors ( ). 3. In the second value (Enter colors order (separated by a space)), enter the order of colors separated by a space without signs (3 C K), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Error or error text of incorrectly entered color array data (Error: Please, enter current colors.).

BASIC OPERATION OF SORTING ALGORITHM **(TS0001)**

Author: DenisDennisov	**Spec ID:** TP0001	**Priority:** 1	**Producer:** DenisDennisov	**Developer:** DenisDennisov
OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** 3, C, K;				

TC ID/Priority	**TCBS0003**	**2**
IDEA: One element sorting **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** C **2. Color order:** 3, C, K		
Revision History		
Created on: 04.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		

PROCEDURE	**EXPECTED RESULT**
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter one color element (C). 3. In the second value (Enter colors order (separated by a space)), enter the color order separated by a space without signs (3 C K), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	One color element that was passed in the array (C).

BASIC OPERATION OF SORTING ALGORITHM **(TS0001)**

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OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** 3, C, K;				

TC ID/Priority	**TCBS0004**	**2**
IDEA: One color elements sorting **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** K, K **2. Color order:** 3, C, K		
Revision History		
Created on: 04.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		
PROCEDURE	**EXPECTED RESULT**	
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter elements of the same color separated by a space without signs (K K). 3. In the second value (Enter colors order (separated by a space)), enter the order of colors separated by a space without signs (3 C K), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Sorted array of colors in the given order of one color (K, K).	

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OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** 3, C, K;				

TC ID/Priority	**TCBS0005**	**2**
IDEA: Sorting elements with symbols **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** -C, @C, !K+ **2. Color order:** 3, C, K		
Revision History		
Created on: 04.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		

PROCEDURE	**EXPECTED RESULT**
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter the color elements separated by a space without commas, but with symbols (-C @C !K+). 3. In the second value (Enter colors order (separated by a space)), enter the color order separated by a space without signs (3 C K), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Error or error text of incorrectly entered color array data (Error: Please, enter current colors.).

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OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** 3, C, K;				

TC ID/Priority	**TCBS0006**	**2**
IDEA: Sorting elements with numbers **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** C, 5, K **2. Color order:** 3, C, K		
Revision History		
Created on: 04.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		
PROCEDURE	**EXPECTED RESULT**	
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter the array of colors and a number separated by a space without signs (C 5 K). 3. In the second value (Enter colors order (separated by a space)), enter the order of colors separated by a space without signs (3 C K), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Sorted array of colors in the given order without numbers (C, K).	

BASIC OPERATION OF SORTING ALGORITHM **(TS0001)**

Author: DenisDennisov	**Spec ID:** TP0001	**Priority:** 1	**Producer:** DenisDennisov	**Developer:** DenisDennisov
OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** 3, C, K;				

TC ID/Priority	**TCBS0007**	**2**
IDEA: Inverse colors array **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** K, K, K, C, C, C, 3, 3, 3 **2. Color order:** 3, C, K		
Revision History		
Created on: 04.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		

PROCEDURE	**EXPECTED RESULT**
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter the sorted array of colors in reverse order separated by a space without signs (K K K C C C 3 3 3). 3. In the second value (Enter colors order (separated by a space)), enter the order of colors separated by a space without signs (K 3 C), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Sorted array of colors in the given order (3, 3, 3, C, C, C, K, K, K).

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OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** 3, C, K;				

TC ID/Priority	**TCBS0008**	**2**
IDEA: Random order colors **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** C, K, 3, C, K, 3 **2. Color order:** K, 3, C		
Revision History		
Created on: 04.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		
PROCEDURE	**EXPECTED RESULT**	
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter the array of colors separated by a space without signs (C K 3 C K 3). 3. In the second value (Enter colors order (separated by a space)), enter the reverse order of colors separated by a space without signs (3 C K), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Sorted array of colors in the given order (K, K, 3, 3, C, C).	

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OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** 3, C, K;				

TC ID/Priority	**TCBS0009**	**2**
IDEA: Two colors order **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** C, 3, K, C, 3, 3 **2. Color order:** 3, C		
Revision History		
Created on: 04.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		
PROCEDURE	**EXPECTED RESULT**	
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter the array of colors separated by a space without signs (C 3 K C 3 3). 3. In the second value (Enter colors order (separated by a space)), enter the order of colors with two colors separated by a space without signs (3 C), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Sorted array of colors in the given order (3, 3, 3, C, C).	

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OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** З, С, К;				

TC ID/Priority	**TCBS0010**	**2**
IDEA: Unknown color element in array **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** С, К, З, С, Ф **2. Color order:** З, С, К		
Revision History		
Created on: 04.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		

PROCEDURE	**EXPECTED RESULT**
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter the array of colors with an element that is not in the color order, separated by a space without signs (С К З С Ф). 3. In the second value (Enter colors order (separated by a space)), enter the color order separated by a space without signs (З С К), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Sorted array of colors in the given order (З, С, С, К).

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GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **2. Colors order:** 3, C, K; **3. Test cases file:** test_colors_sorting.exe				

TC ID/Priority	**TCBS0011**	**2**
IDEA: Empty colors order **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** 3, C, K **2. Color order:** ( )		
Revision History		
Created on: 05.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		
PROCEDURE	**EXPECTED RESULT**	
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter the array of colors separated by a space without signs (3 C K). 3. In the second value (Enter colors order (separated by a space)), enter an empty color order ( ), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Error or error text of incorrectly entered color order data (Error: Please, enter color order.).	

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OVERVIEW: This test checks the standard operation of the sorting algorithm				
GLOBAL SETUP and ADDITIONAL INFO: **1. Algorithm on C++:** Algorithm.exe; **3. Test cases file:** test_colors_sorting.exe **2. Colors order:** З, С, К;				

TC ID/Priority	**TCBS0012**	**2**
IDEA: Upper and lower colors elements **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** к, З, с, С, с, З, з, к, з, К **2. Color order:** с, З, к		
Revision History		
Created on: 05.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		
PROCEDURE	**EXPECTED RESULT**	
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter the array of colors in upper and lower case separated by a space without signs (к З с С с З з к з К). 3. In the second value (Enter colors order (separated by a space)), enter the order of colors in upper and lower case separated by a space without signs (с З к), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Sorted array of colors in the given order (с с З З к к).	

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TC ID/Priority	**TCBS0013**	**2**
IDEA: Incurrent colors array **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** кК, с3 **2. Color order:** К, З, С		
Revision History		
Created on: 05.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		

PROCEDURE	**EXPECTED RESULT**
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter the array of colors in upper and lower case, separated by a space without signs (кК с3). 3. In the second value (Enter colors order (separated by a space)), enter the order of colors separated by a space without signs (К З С), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Error or error text of incorrectly entered color array data (Error: Please, enter current colors.).

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TC ID/Priority	**TCBS0014**	**2**
IDEA: Limit colors array **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** 3, 3 … x 61 **2. Color order:** K, 3, C		
Revision History		
Created on: 05.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		
PROCEDURE	**EXPECTED RESULT**	
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter the array of colors separated by a space without signs [61 elements] (3, 3 … x 61). 3. In the second value (Enter colors order (separated by a space)), enter the order of colors separated by a space without signs (K 3 C), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Error or error text about the limit of entered data for the color array (Error: Enter very large colors array (min: 1, maximum: 60).).	

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TC ID/Priority	**TCBS0015**	**2**
IDEA: Incorrect array **SETUP and ADDITIONAL INFO:** **1. Testing array colors:** Error!, Oh!, Oh!, Error!, Oh!, Error! **2. Color order:** Oh!, Error!		
Revision History		
Created on: 05.09.2024 **by:** DenisDennisov	New Test Case	
Execution part		
PROCEDURE	**EXPECTED RESULT**	
1. Start file algorithm (Algorithm.exe). 2. In the console that appears, in the first value (Enter colors array (separated by a space)), enter words separated by spaces with signs, without commas (Error! Oh! Oh! Error! Oh! Error!). 3. In the second value (Enter colors order (separated by a space)), enter the order of words, separated by spaces with signs, without commas (Oh! Error!), with which the array from the first value should be sorted. 4. Run the algorithm. 5. Write results.	Error or error text for incorrectly entered color array data (Error: Please, enter current colors.).	