

isEquilateral(int x, int y, int z)

Valid Classes

1. $x \geq 1, y \geq 1, z \geq 1; x < y + z; y < x + z; z < y + x$

Invalid Classes

1. $x < 1, y, z; x < y + z$
2. $x < 1, y, z; y < x + z$
3. $x < 1, y, z; z < y + x$
4. $x, y < 1, z; x < y + z$
5. $x, y < 1, z; y < x + z$
6. $x, y < 1, z; z < y + x$
7. $x, y, z < 1; x < y + z$
8. $x, y, z < 1; y < x + z$
9. $x, y, z < 1; z < y + x$

Boundary Cases

1. $x = 0, 1, 2, y$
2. $\geq 1, z \geq 1$
3. $y = 0, 1, 2, x \geq 1, z \geq 1$
4. $z = 0, 1, 2, x \geq 1, y \geq 1$

Equivalence Class or Boundary Case	Sample Input Values	Expected Result
Valid 1: $x \geq 1, y \geq 1, z \geq 1; x < y + z; y < x + z; z < y + x$	5, 2, 4	True
Invalid 4: $x, y < 1, z; x < y + z$	1, 0, 2	IllegalArgumentException
Invalid 7: $x, y, z < 1; x < y + z$	1, 3, -1	IllegalArgumentException
Boundary 1: $x = 0, 1, 2, y \geq 1, z \geq 1$	0, 2, 2	IllegalArgumentException
	1, 2, 2	False
	2, 2, 2	True
Boundary 2: $z = 0, 1, 2, x \geq 1, y \geq 1$	2, 2, 0	IllegalArgumentException
	2, 2, 1	False
	2, 2, 2	True

isPasswordValid(String password)

Valid Classes

1. $8 < \text{size} < 20$; contains digit, uppercase letter, lowercase letter, and special character

Invalid Classes

1. $8 < \text{size} < 20$; does not contain digit, may or may not contain uppercase letter, lowercase letter, and special character
2. $8 < \text{size} < 20$; does not contain uppercase letter, may or may not contain digit, lowercase letter, and special character
3. $8 < \text{size} < 20$; does not contain lowercase letter, may or may not contain digit, uppercase letter, and special character
4. $8 < \text{size} < 20$; does not contain special character, may or may not contain digit, uppercase letter, and lowercase letter
5. $\text{size} < 8$; contains all required characters
6. $\text{size} > 20$; contains all required characters

Boundary Cases

1. $\text{size} = 7, 8, 9$; contains all required characters
2. $\text{size} = 19, 20, 21$; contains all required characters

Equivalence Class or Boundary Case	Sample Input Values	Expected Result
Valid 1: $8 < \text{size} < 20$; contains digit, uppercase letter, lowercase letter, and special character	validPass1!	True
Invalid 2: $8 < \text{size} < 20$; does not contain uppercase letter, may or may not contain	notvalld!	False

digit, lowercase letter, and special character		
Invalid 5: size < 8; contains all required characters	nOp3!	False
Boundary 1: size = 7, 8, 9; contains all required characters	Nuh!uh0	False
	F1nally!	True
	TotVal1d!	True
Boundary 2: size = 19, 20, 21; contains all required characters	ThisOneisOkay\$\$1819	True
	Th1s1sJustRight!1920	True
	This1sway!toolong2021	False