Equivalent classes

Equivalence classes for the fields "State", "Last Name", "User ID", and "Student ID" described below.

State — the standard Post Office two-character abbreviation for the states, districts, territories, etc. of the United States.

Hint:

#	Equivalence class	Test input example	Expected result
1	Positive class: two uppercase letters	NY	Input is accepted
2	Negative class: less than two letters	N	Input is rejected: too short
3	Negative class: more than two letters	NYC	Input is rejected: too long
4	Negative class: lowercase letters	ny	Input is rejected: two capital lettere required
5	Negative class: uppercase letter + special symbol	N!	Input is rejected
6	Negative class: uppercase letter + number	N1	Input is rejected

Last Name — one to fifteen characters, can contain alphabetic characters, periods, hyphens, apostrophes, spaces, and numbers.

#	Equivalence class	Test input example	Expected result
1	Positive class: 1 - 15 characters (including alphabetic characters, periods, hyphens,	O'Henry	Input is accepted

	apostrophes, spaces, and numbers)		
2	Negative class: 0 characters		Input is rejected: too short
3	Negative class: 15+ characters	Van Cent Coll Der Lin	Input is rejected: too long
4	Negative class: special symbols	McKelly!	Input is rejected

User ID — eight characters at least two of which are not alphabetic (numeric, special, nonprinting).

#	Equivalence class	Test input example	Expected result
1	Positive class: 8 characters including 2+ not alphabetic	qatest#1	Input is accepted
2	Negative class: less than 8 characters	qa#1	Input is rejected: too short
3	Negative class: more than 8 characters	qualityassurancetest#1	Input is rejected: too long
4	Negative class: 8 only alphabetic characters	qauserid	Input is rejected
5	Negative class: 8 characters including 1 not alphabetic	qatests1	Input is rejected

Student ID — eight characters. The first two represent the student's home campus while the last six are a unique six-digit number. Valid home campus abbreviations are:

1. AN, Annandale;
2. LC, Las Cruces;
3. RW, Riverside West;
4. SM, San Mateo;
5. TA, Talbot;
6. WE, Weber;

7. WN, Wenatchee.

#	Equivalence class	Test input example	Expected result
1	Positive class: 2 uppercase letters + unique 6-digit number	AN356781	Input is accepted
2	Negative class: 2 uppercase letter + unique 5-digit number	AN35678	Input is rejected: too short
3	Negative class: 2 uppercase letter + unique 7-digit number	AN3567889	Input is rejected: too long
4	Negative class: 2 lowercase letters + unique 6-digit number	an356781	Input is rejected
5	Negative class: special symbols + unique 6-digit number	##735629	Input is rejected
6	Negative class: 2 uppercase letters + 6 characters including special symbol	AN654#12	Input is rejected
7	Negative class: 2 uppercase letters + 6 characters including letters	AN654S12	Input is rejected
8	Positive class: non-existant campus abbreviation + unique 6-digit number	XX648392	Input is rejected