

Assignment 3 Test Criteria

Grading rubric

- error cases: 10%
- legal tests: 90%

1. Cipher (rotstr)

- Error cases (check: error messages on **stderr**; exit status)
 - first value read is not a number
 - input string has non-alphanumeric character
- Legal cases (check exit status for each test) (below: N = rotation value)
 - $N > 0, N < 26$
 - zero strings
 - all lower case
 - all upper case
 - numbers
 - mixed upper and lower and numbers
 - $N > 26$ (let's say $N > 1000$)
 - zero strings
 - all lower case
 - all upper case
 - numbers
 - mixed upper and lower and numbers
 - $N = 0$
 - same input strings as above
 - $N < 0, N < 26$
 - same input strings as above
 - $N < 0$ (say $N < -1000$)
 - same input strings as above

2. Palindromes

- error cases: none
- legal inputs: (check exit status for each input): Use all combinations of the following:
 - case of letters:
 - only lower case
 - only upper case
 - mixed upper and lower case
 - presence/absence of numbers

- presence/absence of non-alphanumeric characters (e.g., @ # & *)

3. Vowels

- error cases (check: error msg on stderr; exit status)
 - input string has non-letter character
- legal inputs (test exit status). Use all combinations of the following:
 - which vowels are present:
 - word with no vowels (e.g., syzygy)
 - word with just a single vowel
 - with multiple occurrences of the same vowel
 - word with multiple different vowels
 - case of vowels:
 - only lower
 - only upper
 - mixed upper and lower

4. Mayan

- error cases (check stderr and exit status):
 - input string has a character that is not a base-20 numeral:
 - a letter other than [a-tA-T]
 - a character that is not a letter
- legal cases: Use all combinations of the following:
 - case:
 - all upper
 - all lower
 - mixed upper and lower
 - number of letters in the input string:
 - only one
 - two letters
 - many letters (say, 5)
 - no. of strings in the input stream:
 - one string
 - several strings (say, 5)
- Restrictions:
 - should not use if-else structure
 - should not use math library