

Sarah Hart, Zackry Ulep
AP Computer Science
Myers
14 August 2019

Unit 1 Project

Password Generator Algorithm

Step 1: Pick out the first and the last characters of the website's name. If the characters involve a number, use the first corresponding letter on a number dial pad.

Step 2: Move the letters to two letters down. If the letter is at the end, move onto A and so forth.

Step 3: Count the number of characters in the website's name. If it is a single digit, place a zero in the front.

Step 4: Insert the last two digits

Step 5: Take out the vowels in the website's name. If there is no vowels, or involves other characters that are not letters, use the word, "mpty".

Step 6: Insert the letters in lowercase, while making the last letter capitalized

Step 7: Identify if the two digits in the password is either odd, even, or both. Do not count zeros.

Step 8: Place a question mark if it's even and an exclamation mark if it's odd at the end. If there is a zero, place a pound sign

Annotated Example:

<https://www.youtube.com/>

Step 1: Pick out the first and the last characters of the website's name. If the characters involves a number, use the first corresponding letter on a number dial pad.

Outcome: Y and E

Step 2: Move the letters to two letters down. If the letter is at the end, move onto A and so forth.

Outcome: AG

Step 3: Count the number of characters in the website's name. If it is a single digit, place a zero in the front.

Outcome: 07

Step 4: Insert the digits

Outcome: AG07

Step 5: Take out the vowels in the website's name. If there is no vowels or involves other characters that are not letters, use the word, "mpty".

Outcome: Youtube → ytb

Step 6: Insert the letters in lowercase, while making the last letter capitalized

Outcome: AG07ytB

Step 7: Identify if the two digits in the password is either odd, even, or both. Do not count zeros.

Outcome: 0 doesn't count. 7 is odd.

Step 8: Place a question mark if it's even and an exclamation mark if it's odd at the end. If there is a zero, place a pound sign

Outcome: AG07ytB#!

Web site	https://www.spotify.com/	https://twitter.com/	https://www.instagram.com/	https://www.netflix.com/	https://www.23andme.com/
Step 1:	S and Y	T and R	I and M	N and X	2 and E
Step 2:	UA	VT	KO	PZ	CG
Step 3:	07	07	09	07	07
Step 4:	UA07	VT07	KO09	PZ07	CG07
Step 5:	Spotify → sptfy	Twitter → twttr	Instagram → nstgrm	Netflix → ntflx	23andme → mpty
Step 6:	UA07sptfY	VT07twtr	KO09nstgrm	PZ07ntflX	CG07mpty
Step 7:	0 doesn't count. 7 is odd.	0 doesn't count. 7 is odd	0 doesn't count. 9 is odd	0 doesn't count. 7 is odd.	0 doesn't count. 7 is odd.
Step 8:	UA07sptfY#!	VT07twtr#!	KO09nstgrm#!	PZ07ntflX#!	CG07mpty#!