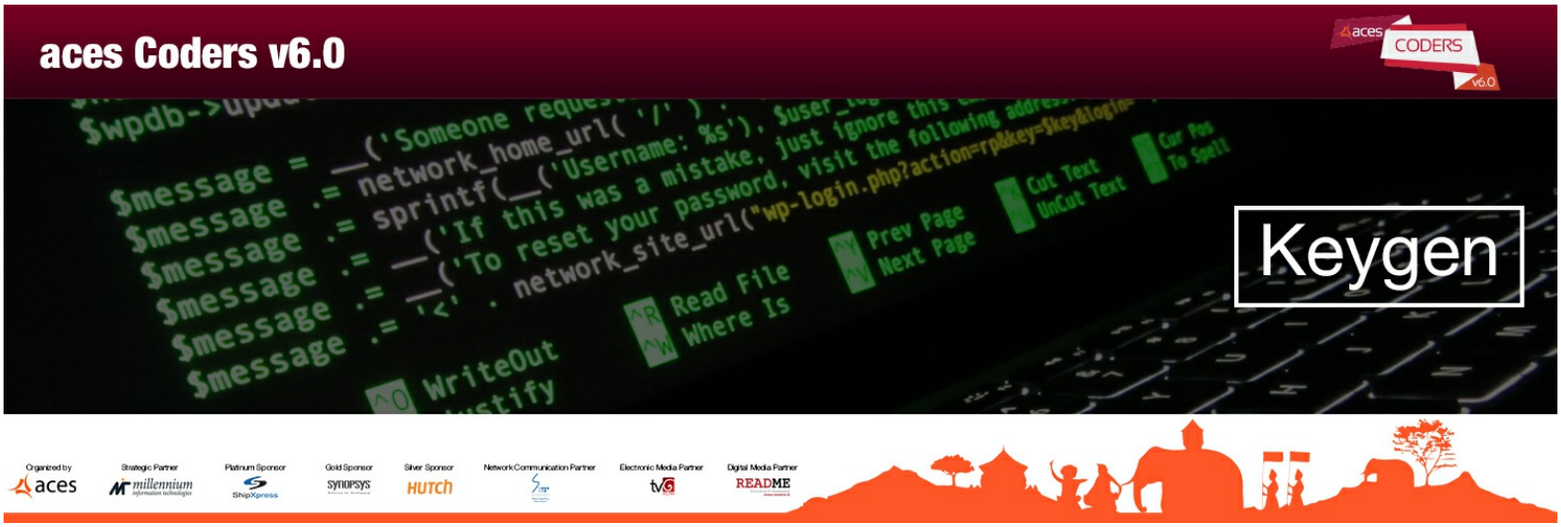
A keygen



Dilshan needs to install a specific commercial IDE software in his machine. But the software is very expensive and he does not have enough money to buy it. Therefore, he has decided to break the software by reverse engineering the key validator of the software and implement a keygen for his usage. Now he is stuck in the process and your task is to help him crack the software by implementing a keygen for it.

You will get the key validator program of the software and you can use any x86 disassembler/debugger in use (gdb, IDA free, olydbg, etc...) and analyse the key validator.

A serial key needed by the software includes 25 characters. According to the Dilshan's research, the serial key has 5 separate sections and the whole serial key depends on the first part (aka the seed) of the key. It can be a string containing letters and numbers which was decided by the company that owned the software. Example: AQhgi-E99E0-4I1AF-RH5GL-14J68 Above serial key is a valid key and the whole key depends on the seed of it. In the above example, The seed value is "AQhgi".

Dilshan's plan is to generate serial keys for given seeds. So your program should get the seed value as the input and should output the complete serial key.

key validator program - Link(url)

Input Format

seed value

Constraints

A seed is 5 characters long.

Output Format

You program should output the serial key. 5 sections should be seperated with dash("-").

Sample Input

AQhgi

Sample Output

AQhgi-E99E0-4I1AF-RH5GL-14J68

Explanation