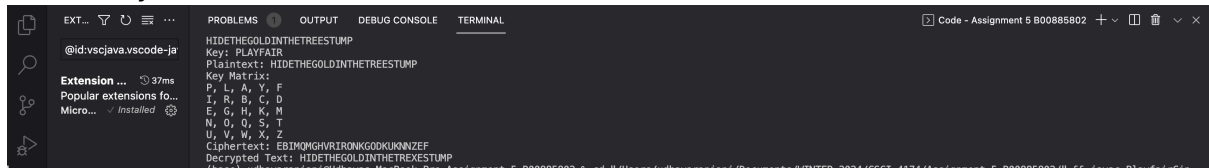


Sample inputs and outputs:

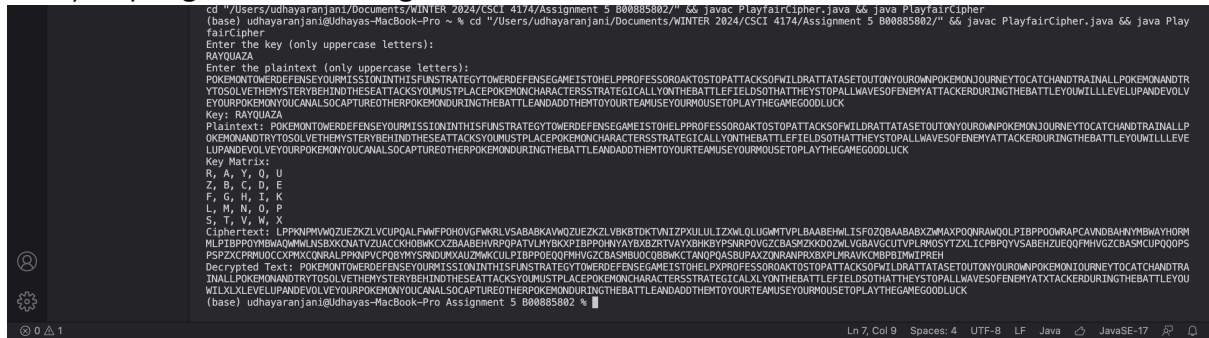
- 1) Plaintext: HIDETHEGOLDINTHETREESTUMP
Key: PLAYFAIR



```
EXT... OUTPUT DEBUG CONSOLE TERMINAL
@id:vscode-java
Extension... 37ms
Popular extensions fo...
Micro... Installed

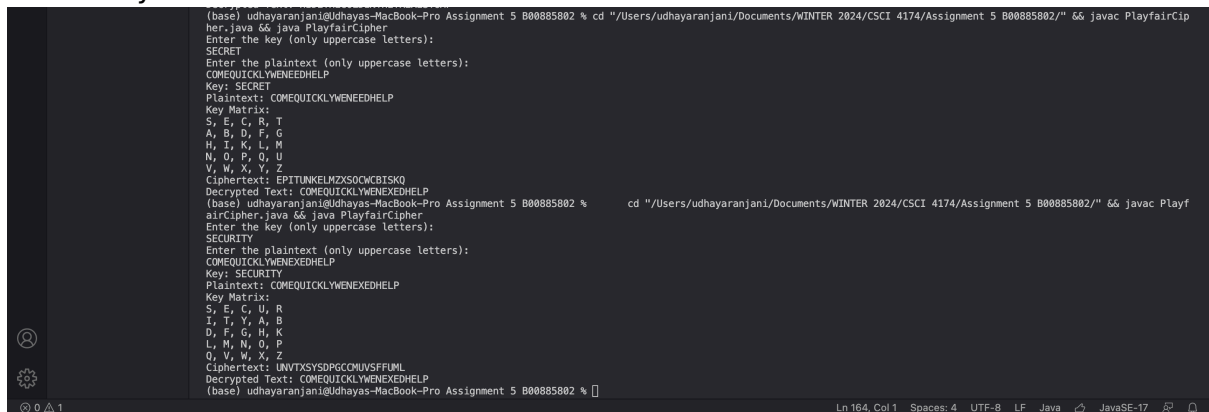
HIDETHEGOLDINTHETREESTUMP
Key: PLAYFAIR
Plaintext: HIDETHEGOLDINTHETREESTUMP
Key Matrix:
P, L, A, Y, F
I, R, B, C, D
E, G, H, K, M
N, O, Q, S, T
U, V, W, X, Z
Ciphertext: EBIMQMGAVIRIRWKGODKUNINZF
Decrypted Text: HIDETHEGOLDINTHETREESTUMP
```

- 2) Input given in the assignment



```
cd "/Users/udhayanjan1/Documents/WINTER 2024/CSCI 4174/Assignment 5 B00885802/" && javac PlayfairCipher.java && java PlayfairCipher
(base) udhayanjan1@Udhayas-MacBook-Pro ~ % cd "/Users/udhayanjan1/Documents/WINTER 2024/CSCI 4174/Assignment 5 B00885802/" && javac PlayfairCipher.java && java PlayfairCipher
Enter the key (only uppercase letters):
RAYQUAZA
Enter the plaintext (only uppercase letters):
POKEMONWONDERDEFENSEYOURMISSIONINTHISFUNSTRATEGYTOWERDEFENSEGAMEISTOHELPPOFFESSORAKTOSTOPATTACKSOFWILDRATTATASETOUTONYOURWONPOKEMONJOURNEYTOCATCHANDTRAINALLPOKEMONANDTRYTOSOLVEITHEMYSTERYBEHINDTHESEATTACKSYOUMUSTPLACEPOKEMONCHARACTERSSTRATEGICALLYONTHEBATTLEFIELDSTHATTHEYSTOPALLWAVESOFFENEMYATTACKERDURINGTHEBATTLEYOUWILLLEVE
Key: RAYQUAZA
Plaintext: POKEMONWONDERDEFENSEYOURMISSIONINTHISFUNSTRATEGYTOWERDEFENSEGAMEISTOHELPPOFFESSORAKTOSTOPATTACKSOFWILDRATTATASETOUTONYOURWONPOKEMONJOURNEYTOCATCHANDTRAINALLPOKEMONANDTRYTOSOLVEITHEMYSTERYBEHINDTHESEATTACKSYOUMUSTPLACEPOKEMONCHARACTERSSTRATEGICALLYONTHEBATTLEFIELDSTHATTHEYSTOPALLWAVESOFFENEMYATTACKERDURINGTHEBATTLEYOUWILLLEVE
LUPANDEVOLVEYOURPOKEMONYOU CANALSO CAPTURE OTHERPOKEMON DURING THE BATTLE AND ADD THEM TO YOUR TEAM USE YOUR MOUSE TO PLAY THE GAME GOOD LUCK
Key Matrix:
R, A, Y, Q, U, Z
V, B, C, D, E
F, G, H, I, K
L, M, N, O, P
S, T, V, W, X
Ciphertext: LPPKNPMWQZUEZKZLVCUPQALFWFPOHGVFWKRLVSABABKAVQZUEZKZLVBKBDTKYVNZPXULITZWMLQUGMTVPLBAABEHLISFQZQBAABABXZWMXPQONRAWQOLPIBPQOMRAPCAINDBAHNYMBWAYHORM
Decrypted Text: POKEMONWONDERDEFENSEYOURMISSIONINTHISFUNSTRATEGYTOWERDEFENSEGAMEISTOHELPPOFFESSORAKTOSTOPATTACKSOFWILDRATTATASETOUTONYOURWONPOKEMONJOURNEYTOCATCHANDTRAINALLPOKEMONANDTRYTOSOLVEITHEMYSTERYBEHINDTHESEATTACKSYOUMUSTPLACEPOKEMONCHARACTERSSTRATEGICALLYONTHEBATTLEFIELDSTHATTHEYSTOPALLWAVESOFFENEMYATTACKERDURINGTHEBATTLEYOUWILLLEVE
(base) udhayanjan1@Udhayas-MacBook-Pro Assignment 5 B00885802 %
```

- 3) Plaintext: COMEQUICKLYWENEEDHELP
Key1: SECRET
Key2: SECURITY



```
(base) udhayanjan1@Udhayas-MacBook-Pro Assignment 5 B00885802 % cd "/Users/udhayanjan1/Documents/WINTER 2024/CSCI 4174/Assignment 5 B00885802/" && javac PlayfairCipher.java && java PlayfairCipher
Enter the key (only uppercase letters):
SECRET
Enter the plaintext (only uppercase letters):
COMEQUICKLYWENEEDHELP
Key: SECRET
Plaintext: COMEQUICKLYWENEEDHELP
Key Matrix:
S, E, C, R, T
A, B, D, F, G
H, I, K, L, M
N, O, P, Q, U
V, W, X, Y, Z
Ciphertext: EPITUNKELMZXSQWCBSKQ
Decrypted Text: COMEQUICKLYWENEEDHELP
(base) udhayanjan1@Udhayas-MacBook-Pro Assignment 5 B00885802 % cd "/Users/udhayanjan1/Documents/WINTER 2024/CSCI 4174/Assignment 5 B00885802/" && javac PlayfairCipher.java && java PlayfairCipher
Enter the key (only uppercase letters):
SECURITY
Enter the plaintext (only uppercase letters):
COMEQUICKLYWENEEDHELP
Key: SECURITY
Plaintext: COMEQUICKLYWENEEDHELP
Key Matrix:
S, E, C, U, R
I, T, Y, A, B
D, F, G, H, K
L, M, N, O, P
Q, V, W, X, Z
Ciphertext: UNVTXSYSDPGCOMUVSFUML
Decrypted Text: COMEQUICKLYWENEEDHELP
(base) udhayanjan1@Udhayas-MacBook-Pro Assignment 5 B00885802 %
```