

Java2 HW2

20190310

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```
public static int getNumber(char upperCaseLetter){
    if(upperCaseLetter == 'A' || upperCaseLetter == 'B' || upperCaseLetter == 'C')
        return 2;
    else if(upperCaseLetter == 'D' || upperCaseLetter == 'E' || upperCaseLetter == 'F')
        return 3;
    else if(upperCaseLetter == 'G' || upperCaseLetter == 'H' || upperCaseLetter == 'I')
        return 4;
    else if(upperCaseLetter == 'J' || upperCaseLetter == 'K' || upperCaseLetter == 'L')
        return 5;
    else if(upperCaseLetter == 'M' || upperCaseLetter == 'N' || upperCaseLetter == 'O')
        return 6;
    else if(upperCaseLetter == 'P' || upperCaseLetter == 'Q' || upperCaseLetter == 'R' || upperCaseLetter == 'S')
        return 7;
    else if(upperCaseLetter == 'T' || upperCaseLetter == 'U' || upperCaseLetter == 'V')
        return 8;
    else if(upperCaseLetter == 'W' || upperCaseLetter == 'X' || upperCaseLetter == 'Y' || upperCaseLetter == 'Z')
        return 9;
    else
        return 0;
}
```

First, use the function `getNumber` to set the letters to the numbers.

```
public static void main(String[] args){
    String phoneNumber = "";
    String output = "";
    HashMap<String, String> map = new HashMap<>();
    try{
```

```

Scanner source = new Scanner(new File("/Users/xueyiheng/Desktop/i
nput.txt"));
while(source.hasNext()){
    phNumber = source.next();
    output = "";
    for(int i = 0 ; i < phNumber.length() ; i++){
        char character = Character.toUpperCase(phNumber.charAt(i)

);

        if(Character.isLetter(character)){
            int num = getNumber(character);
            output = output + num;
        }
        else{
            output = output + character;
        }
    }
    map.put(phNumber, output);}
Scanner userInput=new Scanner(System.in);
System.out.print("Please input numbers in 9-keypad: ");
String str=userInput.next();
int flag=0;
for (HashMap.Entry<String,String> entry : map.entrySet()) {
    if(str.equalsIgnoreCase(entry.getValue())){
        System.out.println(entry.getKey());
        flag=1;
    }
}
if(flag==0) System.out.println("No matchings found");
}catch(Exception e){System.out.println("Input file is missing");}
}
# This code refers to chegg website.

```

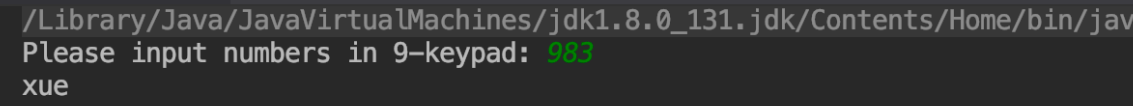
There are some names saved in `input.txt` file.

Andes
 coder
 codes
 cao
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 qi
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And we can test the input and output as below.

```
Run: PhoneKeyPad x
/Library/Java/JavaVirtualMachines/jdk1.8.0_131.jdk/Contents/Home/bin/java ...
Please input numbers in 9-keypad: 26337
codes
Andes
coder

Process finished with exit code 0
```



```
Run: PhoneKeyPad x
/Library/Java/JavaVirtualMachines/jdk1.8.0_131.jdk/Contents/Home/bin/java ...
Please input numbers in 9-keypad: 983
xue
Process finished with exit code 0
```