

[Encryption class]

```
class Encryption {
    private String message;
    private int key;

    String getMessage() {
        return message;
    }

    void setMessage(String message) {
        this.message = message;
    }

    int getKey() {
        return key;
    }

    void setKey(int key) {
        this.key = key;
    }

    //Encryption method which encrypt a message with the
    given key
    String encryption() {

        //Convert the given message to an array of chars
        char[] chars = this.message.toCharArray();

        for (int i = 0; i < chars.length; i++) {
```

```

        if (chars[i] == ' ') continue;
        chars[i] = (char) (((int) chars[i]) + key);

    }
    this.message = new String(chars);
    return message;
} //End of method

} //End of class

```

[Decryption class]

```

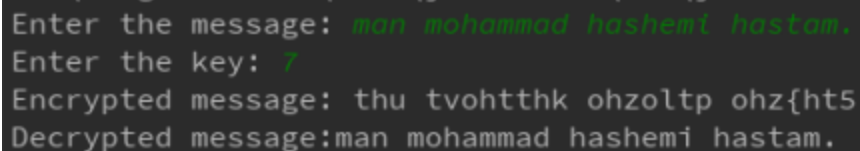
class Decryption {
    //Decryption method which decrypt the return
    // message from the encryption method
    //of Encryption.class
    String decryption(Encryption encryption) {
        char[] chars =
encryption.getMessage().toCharArray();
        for (int i = 0; i <
encryption.getMessage().length(); i++) {
            //Skip spaces
            if (chars[i] == ' ') continue;
            chars[i] = (char) (((int) chars[i]) -
encryption.getKey());
        }

        encryption.setMessage(new String(chars));
        return encryption.getMessage();
    } //End of Decryption
} //End of class

```

[Menu class]

```
public class Menu {  
    public static void main(String[] args) {  
        Scanner scanner = new Scanner(System.in);  
        Encryption encryption = new Encryption();  
        Decryption decryption = new Decryption();  
  
        System.out.print("Enter the message: ");  
        encryption.setMessage(scanner.nextLine());  
  
        System.out.print("Enter the key: ");  
        encryption.setKey(scanner.nextInt());  
  
        System.out.println("Encrypted message: " +  
encryption.encryption());  
  
        System.out.println("Decrypted message:" +  
decryption.decryption(encryption));  
  
    } //End of main method  
  
} //End of class
```

A screenshot of a terminal window showing the execution of the program. The input message is "man mohammad hashemi hastam." and the key is 7. The output shows the encrypted message as "thu tvohtthk ohzoltp ohz{ht5" and the decrypted message as "man mohammad hashemi hastam.".

```
Enter the message: man mohammad hashemi hastam.  
Enter the key: 7  
Encrypted message: thu tvohtthk ohzoltp ohz{ht5  
Decrypted message:man mohammad hashemi hastam.
```

```

src/Menu.java
Please, commit your changes or stash them before you can switch branches.
Aborting
→ Encrypt git:(develop) X git log
→ Encrypt git:(develop) X git checkout master
error: Your local changes to the following files would be overwritten by checkout:
    .idea/workspace.xml
    src/Decryption.java
    src/Encryption.java
    src/Menu.java
Please, commit your changes or stash them before you can switch branches.
Aborting
→ Encrypt git:(develop) X git add -A
→ Encrypt git:(develop) X git commit
Aborting commit due to empty commit message.
→ Encrypt git:(develop) X git log
→ Encrypt git:(develop) X git log
→ Encrypt git:(develop) X git add -A
→ Encrypt git:(develop) X git commit
[develop e284d60] finalizing and add comments
 9 files changed, 84 insertions(+), 65 deletions(-)
 create mode 100644 Doc/Sketch.png
 create mode 100644 Doc/git logs on branch develop before merging.png
→ Encrypt git:(develop) git checkout master
Switched to branch 'master'
Your branch is up-to-date with 'origin/master'.
→ Encrypt git:(master) git status
On branch master
Your branch is up-to-date with 'origin/master'.
nothing to commit, working directory clean
→ Encrypt git:(master) git log
→ Encrypt git:(master) git merge develop
Updating 2865326..e284d60
Fast-forward
 .idea/workspace.xml          | 195 ++++++
 Doc/Sketch.png              | Bin 0 -> 11894 bytes
 Doc/git logs on branch develop before merging.png | Bin 0 -> 161659 bytes
 out/production/Encrypt/Decryption.class           | Bin 0 -> 792 bytes
 out/production/Encrypt/Encryption.class           | Bin 0 -> 1012 bytes
 out/production/Encrypt/META-INF/Encrypt.kotlin_module | Bin 0 -> 16 bytes
 out/production/Encrypt/Menu.class                 | Bin 0 -> 1611 bytes
 src/Decryption.java          | 24 ++++++
 src/Encryption.java          | 44 ++++++
 src/Menu.java                | 31 ++++++
10 files changed, 293 insertions(+), 1 deletion(-)
 create mode 100644 Doc/Sketch.png
 create mode 100644 Doc/git logs on branch develop before merging.png
 create mode 100644 out/production/Encrypt/Decryption.class
 create mode 100644 out/production/Encrypt/Encryption.class
 create mode 100644 out/production/Encrypt/META-INF/Encrypt.kotlin_module
 create mode 100644 out/production/Encrypt/Menu.class
 create mode 100644 src/Decryption.java
 create mode 100644 src/Encryption.java
 create mode 100644 src/Menu.java
→ Encrypt git:(master) 

```



git



```
commit 0c064c081a55743e516c3772bd8792e9a435b81a
Author: mohammad <mohammad.hashemi747@gmail.com>
Date: Tue Mar 12 13:34:01 2019 +0330
```

Completed

the code run perfectly and now it doesn't count the spaces
and decrypt the message strait from encryption class.

```
commit 7a73edacedec0d14431b722625f1b1c3bbc0baed
Author: mohammad <mohammad.hashemi747@gmail.com>
Date: Tue Mar 12 12:24:06 2019 +0330
```

Fixing the bug of encryption method

Now the encryption method returns the corect ecrypted message but still count the spaces.

```
commit 059005fad9c681e2c78a20522aa668022cada5fa
Author: mohammad <mohammad.hashemi747@gmail.com>
Date: Tue Mar 12 10:29:01 2019 +0330
```

implement the menu class and run for the first time

there is a problem with producing the message in Encryption class

```
commit 8850a9cc9cb42b032904a2c3ee8e001933729c58
Author: mohammad <mohammad.hashemi747@gmail.com>
Date: Tue Mar 12 10:04:53 2019 +0330
```

Added decryption method

```
commit 9c4f96afc22d632c511ef754fc88cc6c87112571
Author: mohammad <mohammad.hashemi747@gmail.com>
Date: Mon Mar 11 21:32:52 2019 +0330
```

Add Menu, Ecrption and Decryption calsses and define encryption method for Encryption class

```
commit 286532651dc5fb120153a4407539cad82a125ab8
Author: mohammad <mohammad.hashemi747@gmail.com>
Date: Mon Mar 11 20:23:48 2019 +0330
```

Just create the project

(END)