Encryption

SAMPLE OUTPUT

Sample output 1 (Normal Use):

```
File      : wayby001_petals.py
Author    : Batman
Student ID : 0123456X
Description: Programming Assignment 1 - Encryption
This is my own work as defined by the Eynesbury Academic Misconduct Policy.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 1
Please enter a new message: ! 1 AZ az ~
Your message is: '! 1 AZ az ~'.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 2
Your message was successfully encrypted.
Your message is: 'IHYHi#H*CHG('.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 3
Your message was successfully decrypted.
Your message is: '! 1 AZ az ~'.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 4
Your message is: '! 1 AZ az ~'.

Goodbye
```

Sample output 2 (Error Checking):

```
File      : wayby001_petals.py
Author    : Batman
Student ID : 0123456X
Description: Programming Assignment 1 - Encryption
This is my own work as defined by the Eynesbury Academic Misconduct Policy.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 2
Error: Cannot encrypt an empty message.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 3
Error: Cannot decrypt an empty message.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 0
Invalid choice. Enter an option (1,2,3,4): 5
Invalid choice. Enter an option (1,2,3,4): 1
Please enter a new message

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 4

Goodbye
```

Sample output 3 (Encrypt multiple times):

```
File       : wayby001_petals.py
Author     : Batman
Student ID : 0123456X
Description: Programming Assignment 1 - Encryption
This is my own work as defined by the Eynesbury Academic Misconduct Policy.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 1
Please enter a new message: The eagle returns to nest
Your message is: 'The eagle returns to nest'.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 2
Your message was successfully encrypted.
Your message is: '|1.H.*05.H;.=>;7<H=8H7.<=('.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 2
Your message was successfully encrypted.
Your message is: 'EYVpVRX]VpcVelc_dpe`p_WeP('.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 3
Your message was successfully decrypted.
Your message is: '|1.H.*05.H;.=>;7<H=8H7.<=('.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 3
Your message was successfully decrypted.
Your message is: 'The eagle returns to nest'.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 4
Your message is: 'The eagle returns to nest'.

Goodbye
```

Sample output 4 (Decrypt too many times):

```
File      : wayby001_petals.py
Author    : Batman
Student ID : 0123456X
Description: Programming Assignment 1 - Encryption
This is my own work as defined by the Eynesbury Academic Misconduct Policy.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 1
Please enter a new message: owl
Your message is: 'owl'.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 2
Your message was successfully encrypted.
Your message is: '3;0#'.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 3
Your message was successfully decrypted.
Your message is: 'owl'.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 3
Your message may be fully decrypted...
Are you sure you want to decrypt (y/n)? no
Invalid choice. Enter y or n: yes
Invalid choice. Enter y or n: y
Your message was successfully decrypted.
Your message is: 'bj'.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 3
Your message may be fully decrypted...
Are you sure you want to decrypt (y/n)? y
Your message was successfully decrypted.
Your message is: 'W'.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 3
Your message may be fully decrypted...
```

```
Are you sure you want to decrypt (y/n)? y
Your message was successfully decrypted.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 3
Error: Cannot decrypt an empty message.

------------------
     MAIN MENU
------------------
1. Enter Message
2. Encrypt Message
3. Decrypt Message
4. Quit

Enter an option (1,2,3,4): 4

Goodbye
```