

System Test Plan for SecretMessage

The text in bold in the **Description** column represents the test inputs to the program. You can stop program execution by pressing Ctrl+C. You will need to fill in your Actual Results and write the four additional tests (highlighted in **yellow**).

Test ID	Description	Expected Results	Actual Results
Test Invalid Option (J) (EC, R) Author: Dr. Schmidt	<i>Preconditions:</i> SecretMessage program started Do you want to (E)ncrypt or (D)ecrypt message? J Enter message: Hello	Invalid option.	Invalid option.
Test Encrypt - Message containing only letters with length of five (EC, R) Author: Dr. Schmidt	<i>Preconditions:</i> SecretMessage program started Do you want to (E)ncrypt or (D)ecrypt message? e Enter message: Hello	Hlloe	Hlloe
Test Decrypt - Message containing only letters with length of five (EC, R) Author: Dr. Schmidt	<i>Preconditions:</i> SecretMessage program started Do you want to (E)ncrypt or (D)ecrypt message? decrypt Enter message: Hlloe	Hello	Hello
Test Encrypt - Message containing only letters with length of two (EC, R, B) Author: Dr. Schmidt	<i>Preconditions:</i> SecretMessage program started Do you want to (E)ncrypt or (D)ecrypt message? E Enter message: Hi	Hi	Hi

Test ID	Description	Expected Results	Actual Results
Test Encrypt - Message starting with a digit and has a length of six Author: Shuhao Liu and Anthony Du	<i>Preconditions:</i> SecretMessage program started Do you want to (E)ncrypt or (D)ecrypt message? e Enter message: 2022BJ	2J02B2	2J02B2
Test Encrypt - Message starting with a letter, ending with a digit and a length of 15 Author: Shuhao Liu and Anthony Du	<i>Preconditions:</i> SecretMessage program started Do you want to (E)ncrypt or (D)ecrypt message? e Enter message: Wintergames2022	s2022rgameWinte	s2022rgameWinte
Test Decrypt - Message starting with a digit and has a length of six Author: Shuhao Liu and Anthony Du	<i>Preconditions:</i> SecretMessage program started Do you want to (E)ncrypt or (D)ecrypt message? d Enter message: 2J02B2	2022BJ	2022BJ
Test Decrypt - Message containing only letters with length of two Author: Shuhao Liu and Anthony Du	<i>Preconditions:</i> SecretMessage program started Do you want to (E)ncrypt or (D)ecrypt message? d Enter message: Hi	Hi	Hi
Test Decrypt - Message starting with a letter, ending with a digit and a length of 15 Author: Shuhao Liu and Anthony Du	<i>Preconditions:</i> SecretMessage program started Do you want to (E)ncrypt or (D)ecrypt message? d Enter message: s2022rgameWinte	Wintergames2022	Wintergames2022

Notes

Message: Hello

1. **Swap characters** First and last characters are letters, swap first and last characters: oe11H
2. **Move character** oe1H1
3. **Swap substrings** Length is odd and not divisible by three, leave middle character and swap substrings before and after: H11oe

Therefore, the encrypted version of Hello is H11oe.