

Rot13 Homework: Due October 28, 11:59pm

In the world of ciphers, one is used frequently to hide answers in games. This cipher, known as [ROT-13](#), is a standard use of a [Caesar Cipher](#). Specifically, ROT-13 replaces letters with letters that are 13 places down the alphabet (with wraparound). A table describing the changes is below. This ROT-13 cipher applies to both uppercase and lowercase characters in that uppercase letters ONLY change with uppercase letters, while lowercase letters ONLY change with lowercase letters.

| | | |
|---|---|---|
| A | ↔ | N |
| B | ↔ | O |
| C | ↔ | P |
| D | ↔ | Q |
| E | ↔ | R |
| F | ↔ | S |
| G | ↔ | T |
| H | ↔ | U |
| I | ↔ | V |
| J | ↔ | W |
| K | ↔ | X |
| L | ↔ | Y |
| M | ↔ | Z |

Your homework is to create a ROT-13 cipher for 5-letter phrases. Your code will prompt the user for 5 individual characters, and it should print out each letter after undergoing a ROT-13 change.

Example Output

```
> ./rot13
```

```
Enter 5 characters in a row: memes
```

```
You have entered "memes". The ROT-13 cipher is "zrzrf".
```

Hints

- Make all character variables *char*
- Use 5 `scanf()` statements in a row to properly scan in letters

Requirements

- Only 5 letters may be inputted
- Assume only letters will be inputted - you can ignore all characters that are not letters.

Extra Credit

- Implement ROT-13.5 for an additional 5% (1 point). Make a comment at the top of your code saying that you have attempted the extra credit, so that I will know to grade it.
 - Rot-13.5 refers to a Caesar cipher that changes both numbers and letters. The numbers will change 5 spaces. Any character that is not a number or a letter should be ignored.