
Task1

```
steps = input("Enter the number of steps taken each day (separated by spaces): ")
```

```
stepslist = list(map(int, steps.split()))
```

```
highest_steps = max(stepslist)
lowest_steps = min(stepslist)
average_steps = sum(stepslist) / len(stepslist)
sorted_steps = sorted(stepslist, reverse=True)
```

```
print(f"Highest step count: {highest_steps}")
print(f"Lowest step count: {lowest_steps}")
print(f"Average step count: {average_steps:.2f}")
print("Steps in descending order:", sorted_steps)
```

Task2

```
borrowed_books_input = input("Enter borrowed books in the format 'Book Title - Days Borrowed',  
separated by commas:\n")
```

```
borrowed_books_list = [entry.strip().rsplit(" - ", 1) for entry in borrowed_books_input.split(",")]
borrowed_books_list = [(title, int(days)) for title, days in borrowed_books_list]
```

```
book_borrowing = {}
for title, days in borrowed_books_list:
    book_borrowing[title] = book_borrowing.get(title, 0) + days
```

```
mostborrowed = max(book_borrowing.items(), key=lambda x: x[1])
leastborrowed = min(book_borrowing.items(), key=lambda x: x[1])
```

```
totaldays = sum(book_borrowing.values())
averagedays = totaldays / len(book_borrowing)
```

```
uniquetitles = set(book_borrowing.keys())
```

```
sorted_books = sorted(book_borrowing.items(), key=lambda x: x[1], reverse=True)
```

```
print(f"Most borrowed book: {mostborrowed[0]} ({mostborrowed[1]} days)")
print(f"Least borrowed book: {leastborrowed[0]} ({leastborrowed[1]} days)")
print(f"Average borrowing duration: {averagedays:.2f} days")
print("Unique book titles:", uniquetitles)
print("Books sorted by borrowing duration (descending):")
for title, days in sorted_books:
    print(f" {title}: {days} days")
```

Task3

```
import random
```

```
def scramble_word(word):
    """Scrambles the letters of the word randomly."""
    scrambled = list(word)
```

```
random.shuffle(scrambled)
return ''.join(scrambled)
```

```
wordlist = ["python", "programming", "challenge", "example"]
original_word = random.choice(wordlist)
scrambled_word = scramble_word(original_word)
```

```
print("Welcome to the Word Game!")
print(f"Try to guess the original word based on the scrambled version: {scrambled_word}")
print("You have 5 attempts.")
```

```
attempt = 5
while attempt > 0:
    guess = input("Enter your guess: ").strip().lower()
    if guess == original_word:
        print("Congratulations! You guessed the word correctly.")
        break
    else:
        attempt -= 1
        if attempt > 0:
            print(f"Incorrect guess. Attempts left: {attempt}")
        else:
            print(f"You're out of attempts! The correct word was: {original_word}")
```