

1. Extract Words Starting with a Capital Letter

Problem Statement:

Write a program to extract all words from a text that start with a capital letter. Assume words are separated by spaces or punctuation.

Sample Input:

```
"Welcome to the World of Java Programming. Start Today!"
```

Sample Output:

```
Extracted words:
- Welcome
- World
- Java
- Programming
- Start
- Today
```

2. Validate IPv4 Addresses

Problem Statement:

Write a program to validate IPv4 addresses. A valid IPv4 address has four octets separated by dots (.), where each octet is a number between 0 and 255.

Sample Input:

```
["192.168.1.1", "256.100.50.25", "10.0.0.256", "127.0.0.1"]
```

Sample Output:

```
Valid IPs:
- 192.168.1.1
- 127.0.0.1
Invalid IPs:
- 256.100.50.25 (octet exceeds 255)
- 10.0.0.256 (octet exceeds 255)
```

Hints:

- Each octet can range from 0–255.

3. Find Duplicate Words in a Sentence

Problem Statement:

Write a program to find all duplicate words in a given sentence. The program should ignore case and consider words as duplicates even if they appear in different cases.

Sample Input:

```
"This is a test. This test is only a test."
```

Sample Output:

```
Duplicate words:
- this
- is
- test
- a
```