FEU INSTITUTE OF TECHNOLOGY

INTEGRATIVE PROGRAMMING AND TECHNOLOGIES

PRACTICAL EXAM 1

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SECTION	TW23
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Source Code:

```
exclude_words = ["and", "but", "or", "nor", "for",
"so", "yet", "a", "an", "the", "of"]

user_input = input("Enter a string statement: ")
print('')

words = user_input.split()  # Separates statement into
individual words
count = {}  # Store number of words
lowercase = []
uppercase = []

for word in words:
    word_fixed = word.strip(",.!?")  # Remove
punctuation but keep the original case
    word_lower = word_fixed.lower()  # Convert to
lowercase for checking

    if word_lower.isalnum():
        if word_lower not in exclude_words:  # Check if
it's not in excluded words
            count[word_fixed] = count.get(word_fixed,
0) + 1  # Store original word

#separate words into lowercase and uppercase categories
for word in count:
    if word[0].islower():
        lowercase.append(word)
    else:
        uppercase.append(word)

#to sort in alphabetical order
lowercase.sort()
uppercase.sort()

if count:
    max_length = max(len(word) for word in count)
else:
    max_length = 0
```

```python
for word in lowercase:
    print(word.ljust(max_length + 2) + "- " +
str(count[word]))  # ljust for alignment
for word in uppercase:
    print(word.ljust(max_length + 2) + "- " +
str(count[word]))

print("\nTotal words filtered:", sum(count.values()))
```

Verify:

```
Enter a string statement: The quick brown fox jumps over the lazy dog near the bank of the river the Quick Brown Fox Jumps Over The Lazy Dog Near The Bank Of The River The quick brown fox
jumps over the lazy dog near the bank of the river the Quick Brown Fox Jumps Over The Lazy Dog Near The Top Of The River The slow Brown fox jumps over the lazy dog near the bank of the riv
er the Fast Brown Fox Jumps Over The Lazy Cat near The Bank Of The River The quick brown fox jumps over the Good Cat near the bank of the river the Quick Brown Fox Jumps Over The Lazy Dog
Near The Bank Of The Mountain

bank      - 4
brown     - 3
dog       - 3
fox       - 4
jumps     - 4
lazy      - 3
near      - 5
over      - 4
quick     - 3
river     - 4
slow      - 1
Bank      - 3
Brown     - 5
Cat       - 2
Dog       - 3
Fast      - 1
Fox       - 4
Good      - 1
Jumps     - 4
Lazy      - 4
Mountain  - 1
Near      - 3
Over      - 4
Quick     - 3
River     - 3
Top       - 1

Total words filtered: 80
```

Other Output:

```
Enter a string statement: Hello! I am Tara Victoria E. Gerones and I am 20 years old who is currently studying at FEU TECH.

am         - 2
at         - 1
currently  - 1
is         - 1
old        - 1
studying   - 1
who        - 1
years      - 1
20         - 1
E          - 1
FEU        - 1
Gerones    - 1
Hello      - 1
I          - 2
TECH       - 1
Tara       - 1
Victoria   - 1

Total words filtered: 19
```