```
#introducing domain count frequency of word
def count_word_frequency(text,word):
    text = text.lower()
    words = text.split()
    word_freq = 0

    for w in words:
        if w == word.lower():
            word_freq+=1
    return word_freq
while True :
    print("####################lab exercise###########")
    print("\n 1-> domain")
    print("\n 2-> count string,num,special")
    print("\n 3-> exit")
    choice = int(input("\n enter your choice:"))
    if (choice == 1):
        name = "JAGRATI JAIN"
        dom="hostel managment"
        course="mca-B"
        regno= 2347225
        year= 2023
        about='''I have been developed to assist with various aspects of
hostel management, providing solutions and insights to streamline operations
and enhance efficiency. I have been developed to assist with various aspects
of hostel management, providing solutions and insights to streamline
operations and enhance efficiency.'''
        print("name:",name)
        print("registerno:",regno)
        print("about:",about)
        #datatype of the paragraph  variable
        print("The variable, name is of type:", type(name))
        print("The variable, name is of type:", type(about))
        print("The variable, name is of type:", type(dom))
        print("The variable, name is of type:", type(course))
        print("The variable, name is of type:", type(regno))
        print("The variable, name is of type:", type(year))
        print("\n\n frequency of the specific word")
        tar_word=str(input("\n enter the word:"))
        freqency= count_word_frequency(about,tar_word)
        print(f"the target word '{tar_word}' appears '{freqency}' times in the
text.")
# check the string,numeric special
    elif (choice == 2):
        jag = '''I jagrati jain from mca-B regno:2347225 my domain is hostel
management and i choose this because I have been developed to assist with
various aspects of hostel management, providing solutions and insights to
streamline operations and enhance efficiency. I have been developed to assist
```

```
with various aspects of hostel management, providing solutions and insights to
streamline operations and enhance efficiency.'''
        alphabets = digits = special = 0

        for i in jag:
            if(i.isalpha()):
                alphabets = alphabets + 1
            elif(i.isdigit()):
                digits = digits + 1
            else:
                special = special + 1

            print("\nTotal Number of Alphabets in this String :  ", alphabets)
            print("Total Number of Digits in this String :  ", digits)
            print("Total Number of Special Characters in this String :  ",
special)

    else:
        print(exit)
```

question2

```
sets = set(["Flight", 15.9, 25, True, False])
def Remove(sets):
    sets.discard(25)
    print (sets)

# Driver Code
Remove(sets)

sets.pop()
print(sets)

sets.clear()
print(sets)

del sets

"""
    Performs various set operations: pop(), clear(), discard(), del.

    pop() - You can remove the item at the specified position and get its
value with pop(). The index starts at 0
    clear() - You can remove all items from a list with clear(), making it
empty.
    discard() - Removes a specific element from the set if it exists,
otherwise does nothing.
```

```
    del - you can remove elements from a list using the del statement.Specify
the item to be deleted by index. The first index is 0, and the last is -1.
"""

#sorting the set
def set_operations_example():
    string_set = {"Programming", "Technology", "hostel", "java", "python"}
    print("Initial Set:", string_set)
    sorted_set = sorted(string_set, reverse=True)
    print("Sorted Set (Descending Order):", sorted_set)

set_operations_example()
#packing and unpacking of tuple
def tuple_operations_example():
#packing
    programming_languages = ("Python", "Java", "C++", "JavaScript", "c")
    print("Original Tuple:", programming_languages)
#unpacking
    first_language, second_language, third_language,
fourth_language,fifth_language = programming_languages
    print("\nUnpacked Variables:")
    print("First Language:", first_language)
    print("Second Language:", second_language)
    print("Third Language:", third_language)
    print("Fourth Language:", fourth_language)
    print("Fifth Language:", fifth_language)

tuple_operations_example()
#character count
dmn_name=("h","o","s","t","e","l","m","a","n","g","e","m","e","n","t")
count=0
for i in dmn_name:
    if i=="r":
        count=count+1
print("count of r",count)
#tuple slicing
def slicing_and_negative_indexing(domain_name):
    print("Original Domain Name:", domain_name)
    print("\nPositive Slicing:")
    print("1. Slicing from index 3 to 9:", domain_name[3:10])
    print("2. Slicing from index 0 to 7:", domain_name[:8])
    print("3. Slicing from index 5 to the end:", domain_name[5:])
    print("4. Slicing from index 2 to 11 with step 2:", domain_name[2:12:2])
    print("\nNegative Slicing:")
    print("1. Slicing from the end -8 to the end -3:", domain_name[-8:-2])
    print("2. Slicing from the end -11 to the end -1 with step
2:",domain_name[-11:-1:2])
    print("\nNegative Indexing:")
```

```
    print("Last character:", domain_name[-1])
    print("Second to last character:", domain_name[-2])
domain_name = "hostel management"
slicing_and_negative_indexing(domain_name)
```