Write a program that takes a sentence as input. Capitalize the first letter of the sentence and print the modified sentence.

```
In [1]: a=input("Write a text:")
    print(a.capitalize())
```

Hi hello

Write a program that takes a string as input. Convert the entire string to lowercase and print it.

```
In [6]: string=input("Type something")
    string.lower()
```

Out[6]: 'hi hello'

Write a program that takes a string as input. Convert the entire string to uppercase and print it.

```
In [8]: string=input("Type something")
    string.upper()
```

Out[8]: 'HI THERE'

Write a program that takes a sentence as input. Convert the sentence to title case (where the first letter of each word is capitalized) and print it.

```
In [10]: string=input("Type something")
    string.title()
```

Out[10]: 'A Big Elephant'

Write a program that takes a string with leading spaces as input. Remove the leading spaces and print the stripped string.

```
In [16]: string=input("Type something")
    string.lstrip()
```

Out[16]: 'hi ther'

Write a program that takes a string with trailing spaces as input. Remove the trailing spaces and print the stripped string.

```
In [18]: string=input("Type something")
    string.rstrip()
```

Out[18]: 'hi hello'

Write a program that takes a string with leading and trailing spaces as input. Remove both leading and trailing spaces and print the stripped string.

```
In [20]: string=input("Type something")
    string.strip()
```

Out[20]: 'how are you'

Write a program that takes a sentence and two words (old and new) as input. Replace all occurrences of the old word with the new word in the sentence and print the result.

```
In [22]: string=input("Enter a text:")
    old_word=input("Enter a word to replace:")
    new_word=input("Enter the new word:")
    string.replace(old_word,new_word)
```

```
Out[22]: 'Biriyani is my favourite.'
```

Write a program that takes a string and a character as input. Count the number of times the character appears in the string (case-insensitive) using a loop and conditional statements (or directly with count() after converting the string to a single case).

```
In [28]: string=input("Enter a string")
    char=input("Enter a character")
    string.count(char)

Out[28]: 3

In [32]: string=input("Enter a string")
    char=input("Enter a character")
    string.lower()
    string.lower()
    count=0
```

3 number of times k

for ch in string:
 if ch==char:
 count+=1

Write a program that takes a string and a substring as input. Find the index of the first occurrence of the substring. If the substring is not found, print a message indicating that.

print(f"{count} number of times {char}")

```
In [42]: string=input("Enter a string:")
    string1=input("Enter a substring:")
    index=string.index(string1)
    if index!= -1:
        print(f"the {string1} is found at index {index}")
    else:
        print(f"the{string1} is not found")
```

the Arun is found at index 12

Write a program that takes a string and a substring as input. Find all occurrences of the substring in the string using a while loop and the find() method. Print the starting index of each occurrence.

```
In [19]: string=input("Type something")
    string1=input("Type the word need to find")
    index=string.find(string1)
    while index != -1:
        print(f"The substring is found at",index)
        index=string1.find(string1, index + 1)
```

The substring is found at 6

Write a program that takes a comma-separated string of items as input. Split the string into a list of individual items and print each item.

```
In [27]: strings=input("Enter a comma separeted string")
    text=strings.split(',')
    for string in text:
        print(string.strip())
hi how are you
```

Write a program that takes a filename as input. Check if the filename ends with ".txt". If it does, print "This is a text file.";

Arun

otherwise, print "This is not necessarily a text file."

```
In [29]: file=input("write the filename")
file.endswith(".txt")
```

Out [29]: True

Write a program that takes a line of text as input. Check if the line starts with "Subject: ". If it does, print "This line is likely an email subject."; otherwise, print "This line does not appear to be an email subject."

```
In [33]: text=input("write a text")
   text1=input("starting word of the sentence")
   text.startswith(text1)
```

Out[33]: True

Write a program that takes a string as input and checks if all characters in the string are alphanumeric. Print "Alphanumeric string" or "Not an alphanumeric string."

```
In [47]: string=input("write something")
   if string.isalnum():
        print("Alphanumeric string")
   else:
        print("Not an alphanumeric string")
```

Alphanumeric string

Write a program that takes a string as input and checks if all characters in the string are alphabetic. Print "Alphabetic string" or "Not an alphabetic string."

```
In [63]: text=input("write something")
   if text.isalpha():
        print("Alphabetic string")
   else:
        print("Not an alphabetic string.")
```

Alphabetic string

Write a program that takes a string as input and checks if all characters in the string are decimal digits. Print "Decimal string" or "Not a decimal string."

```
In [69]: text=input("type decimal numbers")
   if text.isdecimal():
        print("Decimal string")
   else:
        print("Not a decimal string")
```

Decimal string

Write a program that takes a string as input and checks if all characters in the string are digits. Print "Digit string" or "Not a digit string."

```
In [73]: text=input("type digits")
   if text.isdigit():
        print("Digit string")
   else:
        print("Not a digit string")
```

Digit string

Write a program that takes a string as input and checks if all characters in the string are numeric characters. Print "Numeric

string" or "Not a numeric string

```
In [77]: text=input("type numbers")
   if text.isnumeric():
        print("Numeric string")
   else:
        print("Not a Numeric string")
```

Not a Numeric string

Write a program that takes a string as input. Check if all cased characters in the string are lowercase. If they are, print "All lowercase"; otherwise, print "Not all lowercase."

```
In [81]: text=input("type something")
   if text.islower():
        print("All lowercase")
   else:
        print("Not all lowercase.")
```

All lowercase

Write a program that takes a string as input. Check if all cased characters in the string are uppercase. If they are, print "All uppercase"; otherwise, print "Not all uppercase."

```
In [85]: text=input("type something")
   if text.isupper():
        print("All uppercase")
   else:
        print("Not all uppercase.")
```

All uppercase

Write a program that takes a string as input. Check if the string is in title case. If it is, print "Title case string"; otherwise, print "Not a title case string."

```
In [95]: text=input("type something")
   if text.istitle():
        print("Title case string")
   else:
        print("Not a title case string.")
```

Title case string

Write a program that takes a string as input. Check if all characters in the string are whitespace characters. If they are, print "Whitespace string"; otherwise, print "Not a whitespace string."

```
In [101... text=input("type something")
   if text.isspace():
        print("Whitespace string")
   else:
        print("Not a whitespace string.")
```

Whitespace string

Write a program that takes a number (as a string) and a desired width as input. Pad the beginning of the number with leading zeros so that it reaches the specified width. Print the zero-filled string.

```
In [111... text=input("type a number")
    text1=int(input("desired width of input"))
    padded_text = text.zfill(text1)
```

```
print("Padded text:", padded_text)
print("Length of padded text:", len(padded_text))
```

Padded text: 000045 Length of padded text: 6

Question: Write a program that takes a string and a width as input. Center the string within the specified width, using '*' as the fill character, and print the result.

```
In [113... text=input("type a number")
    text1=int(input("desired width of input"))
    centered_text = text.center(text1, '*')
    print("Centered string:", centered_text)

Centered string: **34*
```

In []: