## Question1: Write a program that takes a sentence as input. Capitalize the first letter of the sentence and print the modified sentence.

In [2]:
```
sentence = input("enter string")
sentence1 = sentence.capitalize()
print(sentence1)
```

```
Bhagyashree
```

## Question2: Write a program that takes a string as input. Convert the entire string to lowercase and print it.

In [4]:
```
str=input("enter string")
str1=str.lower()
print(str1)
```

```
hii good morning
```

## Question3: Write a program that takes a string as input. Convert the entire string to uppercase and print it.

In [9]:
```
text=input("enter string")
text1=text.upper()
print(text1)
```

```
WELCOME PYTHON LEARNER!
```

## Question4: 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]:
```
sentence=input("enter sentence")
sentence1=sentence.title()
print(sentence1)
```

```
Hii Python Learners
```

## Question5: Write a program that takes a string with leading spaces as input. Remove the leading spaces and print the stripped string.

In [8]:
```
string = "       welcome besant technology"
string.lstrip()
```

Out[8]:
```
'welcome besant technology'
```

## Question6: Write a program that takes a string with trailing spaces as input. Remove the trailing spaces and print the stripped string.

In [11]:
```
text = input("Enter a string with trailing spaces: ")
text1 = text.rstrip()
print(text1)
```

```
   hii python learners
```

## Question 7: 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 [3]:
```
sentence = input("Enter a sentence: ")
old_word = input("Enter the word to replace: ")
new_word = input("Enter the new word: ")
updated_sentence = sentence.replace(old_word, new_word)
print("Updated sentence:", updated_sentence)
```

```
Updated sentence: Hello good evening everone
```

## Question 9 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).

In [4]:
```
sentence = input("Enter a sentence: ")
letter = input("Enter the letter you want to count: ")
sentence = sentence.lower()
letter = letter.lower()
count = sentence.count(letter)
print("The letter appears", count, "times.")
```

```
The letter appears 2 times.
```

## Question 10: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.

In [6]:
```
text = input("Enter a string: ")
sub = input("Enter the substring to find: ")
index = text.find(sub)
if index != -1:
    print("Substring found at index:", index)
else:
    print("Substring not found.")
```

```
Substring found at index: 5
```

## Question 11 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 [9]:
```
text = input("Enter the main string: ")
sub = input("Enter the substring to find: ")
index = text.find(sub)
```

```
while index != -1:
    print("Found at index:", index)
    index = text.find(sub, index + 1)
```

```
Found at index: 6
```

## Question 12 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 [15]:
```
items = input("Enter items separated by commas: ")
item = items.split(',')
for item in item:
    print(item.strip())
```

```
ROSE
LILLY
LOTUS
```

## Question 13 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."; otherwise, print "This is not necessarily a text file."

In [11]:
```
filename = input("Enter the filename: ")
if filename.endswith(".txt"):
    print("This is a text file.")
else:
    print("This is not necessarily a text file.")
```

```
This is a text file.
```

## Question 14 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 [14]:
```
line = input("Enter a line of text: ")
if line.startswith("Subject: "):
    print("This line is likely an email subject.")
else:
    print("This line does not appear to be an email subject.")
```

```
This line does not appear to be an email subject.
```

## Question 15 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 [15]:
```
text = input("Enter a string: ")
if text.isalnum():
    print("Alphanumeric string")
else:
    print("Not an alphanumeric string")
```

```
Alphanumeric string
```

## Question 16 Write a program that takes a string as input and checks if all characters in the string are alphabetic.

In [19]:
```
text = input("Enter a string: ")
text1= text.isalpha()
print(text1)
```

```
True
```

## Question 17 Write a program that takes a string as input and checks if all characters in the string are decimal digits.

In [18]:
```
text = input("Enter a string: ")
text1=text.isdecimal()
print(text1)
```

```
True
```

## Question 18 Write a program that takes a string as input and checks if all characters in the string are digits.

In [34]:
```
text = input("Enter a string: ")
text1=text.isdigit()
print(text1)
```

```
True
```

## Question 19 Write a program that takes a string as input and checks if all characters in the string are numeric characters.

In [20]:
```
text = input("Enter a string: ")
text1= text.isnumeric()
print(text1)
```

```
True
```

## Question 20 Write a program that takes a string as input. Check if all cased characters in the string are lowercase.

In [21]:
```
text = input("Enter a string: ")
text1= text.islower()
print(text1)
```

```
True
```

## Question 21 Write a program that takes a string as input. Check if all cased characters in the string are uppercase.

In [22]:
```
text = input("Enter a string: ")
text1= text.isupper()
print(text1)
```

```
True
```

## Question 22 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 [24]:
```
text = input("Enter a string: ")
if text.istitle():
    print("Title case string")
else:
    print("Not a title case string")
```

```
Title case string
```

## Question 23 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 [28]:
```
text = input("Enter a string: ")
if text.isspace():
    print("Whitespace string")
else:
    print("Not a whitespace string")
```

```
Not a whitespace string
```

## Question 24 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.

In [29]:
```
number = input("Enter a number: ")
width = int(input("Enter desired width: "))
padded_number = number.zfill(width)
print("Zero-filled number:", padded_number)
```

```
Zero-filled number: 00045
```

## Question 25 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 [30]:
```
text = input("Enter a string: ")
width = int(input("Enter desired width: "))
centered_text = text.center(width, '*')
print("Centered string:", centered_text)
```

```
Centered string: ***hello***
```

## Question 26 Write a program that takes two strings as input.Convert both strings to their casefolded forms and then check if they are equal.Print "Case-insensitive match" or "No case-insensitive match".

In [31]:
```
string1 = input("Enter first string: ")
string2 = input("Enter second string: ")
if string1.casefold() == string2.casefold():
    print("Case-insensitive match")
else:
    print("No case-insensitive match")
```

```
Case-insensitive match
```

## Question 27 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]:
```
line = input("Enter a line of text: ")
if line.startswith("Subject: "):
    print("This line is likely an email subject.")
else:
    print("This line does not appear to be an email subject.")
```

```
This line does not appear to be an email subject.
```

In [ ]:
```

```