In [ ]:
```
# string: sequence of a characters.
#  delimit using '', ""
```

In [1]:
```
string="Good Morning. Have a nice day!"
print(string)
```

```
Good Morning. Have a nice day!
```

In [3]:
```
# string slicing
```

In [4]:
```
# print good morning from string
print(string[0:12])
```

```
Good Morning
```

In [5]:
```
# have a nice day
print(string[14:])
```

```
Have a nice day!
```

In [7]:
```
# nice
print(string[-9:-5])
```

```
nice
```

In [8]:
```
# last word
print(string[-1])
```

```
!
```

Modify string

In [10]:
```
# uppercase
print(string.upper())
```

```
GOOD MORNING. HAVE A NICE DAY!
```

In [11]:
```
# lowercas
print(string.lower())
```

```
good morning. have a nice day!
```

In [13]:
```
# capitalize string
print(string.capitalize())
```

```
Good morning. have a nice day!
```

In [14]:
```
# title
print(string.title())
```

```
Good Morning. Have A Nice Day!
```

In [17]:
```
print(string.count('a'))
```

```
3
```

In [20]:
```
str1="     "
print(str1)
```

In [21]:
```
print(str1.isspace())   #Returns True if all characters in the string are whitespaces
```

```
True
```

In [29]:
```
st="    Hello, How    are you ?    "
print(st)
```

```
    Hello, How    are you ?
```

In [30]:
```
# trim
print(st.strip())
print(st.lstrip())
print(st.rstrip())
```

```
Hello, How    are you ?
Hello, How    are you ?
    Hello, How    are you ?
```

In [31]:
```
print(len(st))
print(len(st.strip()))
print(len(st.lstrip()))
print(len(st.rstrip()))
```

```
31
23
27
27
```

In [32]:
```
s="python is a object-oriented programming language"
print(s)
```

```
python is a object-oriented programming language
```

In [34]:
```
print(s.swapcase()) #Swaps cases, lower case becomes upper case and vice versa
```

```
PYTHON IS A OBJECT-ORIENTED PROGRAMMING LANGUAGE
```

In [43]:
```
s.find('s') # return the index of element
```

Out[43]:
```
8
```

In [45]:
```
print(s.find('o'))
```

```
4
```

In [47]:
```
print(s.rfind('o'))  #Searches the string for a specified value and returns the last
```

```
30
```

In [50]:
```
# Index
print(s.index("p"))
```

```
0
```

In [52]:
```
print(s.index('r'))
```

```
20
```

In [53]:
```
# split string
print(s.split())
```

```
['python', 'is', 'a', 'object-oriented', 'programming', 'language']
```

In [55]:
```
st="Hi, How are you?"
st.split(",")
```

Out[55]:
```
['Hi', ' How are you?']
```

In [56]:
```
st.split("?")
```

Out[56]:
```
['Hi, How are you', '']
```

In [59]:
```
# replace
print(st.replace("Hi","Hello"))
```

```
Hello, How are you?
```

In [60]:
```
print(st. replace("i","eyy"))
```

```
Heyy, How are you?
```

In [64]:
```
# join
st="this, is, comma, separed, data"
st=st.split(",")
print(":".join(st))
```

```
this: is: comma: separed: data
```

In [65]:
```
#
l=["this","is","comma", "separated","data"]
print((",".join(l)))
```

```
this,is,comma,separated,data
```

In [72]:
```
print("!! ".join(l))
```

```
this!! is!! comma!! separated!! data
```

In [9]:
```
#  String Formatters
# String formatters allow us to print characters and values at once. You can use the
```

In [73]:
```
age=23
city="pune"
print(" I am %s years old, belongs to %s"%(age,city))
```

```
 I am 23 years old, belongs to pune
```

In [74]:
```
name1="Riya"
name2="Seeta"
print("%s and %s are friend"%(name1, name2))
```

```
Riya and Seeta are friend
```

In [75]:
```
age=23
city="pune"
print(" I am {} years old, belongs to {} ".format(age, city))
```

```
 I am 23 years old, belongs to pune
```

In [76]:
```
age=23
city="pune"
print(f" I am {age} years old, belongs to {city}")
```

```
 I am 23 years old, belongs to pune
```

In [79]:
```
# string concatenation
print("Hello"+" "+"world")
```

```
Hello world
```

In [80]:
```
# reverse string
s="python is a object-oriented programming language"
s1=s[::-1]
print(s1)
```

```
egaugnal gnimmargorp detneiro-tcejbo a si nohtyp
```

In [ ]:
```

```

In [82]:
```
# Python program to check whether the string is Palindrome
s=input("enter the string :")
if s==s[::-1]:
    print(f"{s} is palindrome")
else:
    print(f"{s} is not palindrome")
```

```
enter the string :malayalam
malayalam is palindrome
```

In [83]:
```
s=input("enter the string :")
print("string is palindrome" if s==s[::-1] else "not palindrome")
```

```
enter the string :liril
string is palindrome
```

In [85]:
```
# Reverse words in a given String in Python
s="python is a object-oriented programming language"
print(s.split()[::-1])
```

```
['language', 'programming', 'object-oriented', 'a', 'is', 'python']
```

In [88]:
```
# Reverse words in a given String in Python
s="python is a object-oriented programming language"
s1=s.split()
print(" ".join(reversed(s1)))
```

```
language programming object-oriented a is python
```

In [169]:
```
s="python is a object-oriented programming language"
s1=s.split()
l=[]
for i in s1:
    sp=i[::-1]
    l.append(sp)
    st=" ".join(l)
print(st)
```

```
nohtyp si a detneiro-tcejbo gnimmargorp egaugnal
```

In [101]:
```
# Ways to remove i’th character from string in Python
s="pythQn is a object-oriented programming language123"
# remove 'a'from string
print(s.replace('a',''))
print(s.replace('Q','o',1))
```

```
pythQn is  object-oriented progrmming lnguge123
python is a object-oriented programming language123
```

In [102]:
```
# Ways to remove i’th character from string in Python
s="python is a Qbject-oriented programming language123"
# replace Q by o in second occurence
print(s.replace('Q','o',2))
```

```
python is a object-oriented programming language123
```

In [105]:
```
# remove multiple characters from string
# Using translate() and maketrans()
s="pythQn is a Qbject-Qriented prQgramming language"
print(s.translate(s.maketrans("Q",'o')))
```

```
python is a object-oriented programming language
```

In [ ]:

In [ ]:

In [108]:
```
# Python program to print even length words in a string
s="python is a object-oriented programming language"
s=s.split()
for i in s:
    if len(i)%2==0:
        print(i)
```

```
python
is
language
```

In [110]:
```
# Python - Uppercase Half String
s="python is a object-oriented programming language"
hl=len(s)//2
print(s[:hl]+s[hl:].upper())
```

```
python is a object-orienTED PROGRAMMING LANGUAGE
```

In [115]:
```
# Python program to capitalize the first and last character of each word in a string
s="python is a object-oriented programming language"
s=s.split()
li=[]
for i in s:
    f=i[0].upper()
    l=i[-1].upper()
    s1=f+i[1:-1]+l
    li.append(s1)
    st=" ".join(li)
print(st)
```

```
PythoN IS AA Object-orienteD ProgramminG LanguagE
```

In [154]:
```
# split string in vowels
s=input("enter the string: ")
v="aeiouAEIOU"
for i in s:
    if i in v:
        s=s.replace(i,"*")
s1=s.split("*")
print(s1)
```

```
enter the string: python is a
['pyth', 'n ', 's ', '']
```

In [162]:
```python
# Reverse words in a given String in Python
s="python is a object-oriented programming language"
s1=s.split()[::-1]
s1=" ".join(s1)
print(s1)
print(s1.split()[::-1])
```

```
language programming object-oriented a is python
['python', 'is', 'a', 'object-oriented', 'programming', 'language']
```

In [ ]: