PYTHON PRACTICE SET - 5 :- SOLUTION

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1. Create a list containing several strings. Take input from the user
(search string); display whether
# entered string is available in the list or not.

lst = ['Milan','Vishal','Khan','Kushal']
search=input('Enter a value to search from the list')
if search in lst:
    print('The search value present in list ',lst)
else:
    print('The search value is not available in list ')


#2. Accept the string from the user; display the message whether the
entered string is palindrome
#or not.

str=input('Enter a string ')
str1=str[-1::-1]
if str1 == str:
    print('string is palindrome')
else:
    print('The string not palindrome')


#3. Accept the string from the user; display the string in the reverse
order.

str=input('Enter any string value : ')
print('The value of the string  is : ',str)
str1=str[-1::-1]
print('The value of the reversed string  is : ',str1)
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# 4. Accept the string from the user; allow user to choose from the
following options and perform
# the task as per user’s choice. i). Convert to the upper case, ii).
Convert to the lower case, iii).
# Convert to the swap case, iv). Convert to the title case

str=input('Enter a string value : ')
print('Press 1 to convert string to uppercase')
print('Press 2 to convert string to lowercase')
print('Press 3 to convert string to swapcase')
print('Press 4 to convert string to titlecase')
num=int(input('Enter value here : '))
if num==1:
    print(str.upper())
elif num==2:
    print(str.lower())
elif num==3:
    print(str.swapcase())
elif num==4:
    print(str.title())
else:
    print('invalid input')


#5. Allow users to enter multiple strings in the list; arrange the entered
string into alphabetical
#order and display.

lst=[]
Nolst=int(input('Enter number of string you want to enter : '))
for i in range(Nolst):
    lst.append(input('Enter the value of string : '))
print(lst)
print(sorted(lst))
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#6. Create a tuple and display it. Enter 25 at the third position and
display it again

tpl=(1,2,34)
print(tpl)
l=list(tpl)
l[2]=25
tpl=tuple(l)
print(tpl)


# 7. Create a dictionary named library with following keys (Bookid, Title,
Author, Price, Publisher).

library={'BookId':7,'Title':'The Invisible Man','Author':'H.G.
Wells','Price':2000,'Publisher':'C. Arthur Pearson '}

# a) Display the dictionary
print(library)

# b) Display the name of Author
print('The name of the author is : ',library['Author'])

# c)Display the Bookid
print('The book id is : ',library['BookId'])

# d) Display the length of the dictionary
print('The length of the dictionary is : ',len(library))

# e) Update the price
library['Price']=4900
print('The renewed price is : ',library['Price'])

# f) Insert year as the new key and display the dictionary again.
library['Year']=2001
print('The updated library is : ',library)
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# 8. Create a numeric array and perform following operations on it:

from numpy import *
# 1) Add 2 to each elements
ar=array([34,56,67,3,33,4])
print(ar)
nar=[i+2 for i in ar]
print('After Addition with 2 : ',nar)

# 2)Subtract 3 from each element
from numpy import *
ar=array([34,56,67,3,33,4])
print(ar)
nar=[i-3 for i in ar]
print('After subraction with 3 : ',nar)

# 3) Multiply each element with 3
from numpy import *
ar=array([34,56,67,3,33,4])
print(ar)
nar=[i*3 for i in ar]
print('After multiplication with 3 : ',nar)

# 4)Divide each element by 2
from numpy import *
ar=array([34,56,67,3,33,4])
print(ar)
nar=[i/2 for i in ar]
print('After division with 2 : ',nar)

# 5) max and min
from numpy import *
ar=array([34,56,67,3,33,4])
print(ar)
print('The maximum element from the array is : ',max(ar))
print('The minimum element from the array is : ',min(ar))

# 6) find the average of all elements.
from numpy import *
ar=array([34,56,67,3,33,4])
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print(ar)
print('The average of the array is : ',average(ar))


# 9. Create a numeric array and do the following: append the element, pop the element, insert an
# element at the desired postion, reverse the elements in the array, convert the array to list.

from array import *
ar=array('i',[4,56,98,4,5,77,32])
print(ar)

# append the element
ar.append(4)
print('After appending the element : ',ar)

# pop the element
ar.pop(1)
print('After removing the element : ',ar)

# insert an element at the desired postion
ar.insert(2,23)
print('After inserting the elemtnt : ',ar)

# reverse the elements in the array
ar.reverse()
print('After reversing the array : ',ar)

# convert the array to list
lst = list(ar)
print('Converted into the list : ',lst)


# 10. Accept numeric elements from the user, store it to the array and display. Ask user to enter
#search element. Display the position of the searched element.

from array import*
ar=array('i',[])
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no=int(input('Enter number of elements you want to enter'))
for i in range(no):
    ar.append(int(input('Enter any value : ')))
x=int(input('Enter value to search in element : '))

for i in range(no):
    if ar[i]==x:
        print('The element is present in the array at position : ',i,'And
the value is : ',ar[i])


# 11. Take two arrays enter 5 digits in both arrays. Compare the
corresponding element from each
# array and display only the bigger number.

from numpy import *
ar1=array([2,45,634,4,5])
ar2=array([23,2,33,12,39])
print(fmax(ar1,ar2))


# 12. Accept dimension of the array and its values from the user, create
an array as desired.

from numpy import *
no=int(input('Enter number of dimensional array you want to create : '))


# 13. Create a function to calculate the simple interest.

def simpleInterest(p,r,n):
    si=(p*r*n)/100
    return si
print('The simple interest of the  given data is :
',simpleInterest(1000,5,1))
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# 14. Create a function to perform basic arithmetic operations on the
number.

def arithmatic(a,b):
    print('Addition is : ',a+b)
    print('Subtraction is : ',a-b)
    print('Multiplication is : ',a*b)
    print('Division is : ',a/b)
arithmatic(10,5)


# 15. Accept multiple strings and store it into the list using function.

def lste(no):
    lst=[]
    for i in range(no):
       lst.append(input('Enter value of string : '))
    print(lst)
no=int(input('Enter number of strings you want to insert : '))
lste(no)


# 16. Find the biggest number from three values using lambda.

big= lambda a,b,c:max(a,b,c)
print(big(9,4,5))


#17. Demonstrate the use of:  and ii). pass.

i). break

n=5
for i in range(n):
    if i==3:
        break # this will break the loop when the conditon is true
    else:
        print(i)

#ii). pass
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n=5
for i in range(n):
    if i==3:
        pass # this will pass the current element from the loop
    else:
        print(i)
```