

1. Write a program that accepts a list from user and print the alternate element of list.

```
alist=input("Enter list")
pure=alist.replace(","," ")
elements=pure.split()
print(elements[::2])
```

Enter list 1 2 3 4 5 6 7 8 9

['1', '3', '5', '7', '9']

2. Write a program that accepts a list from user. Your program should reverse the content of list and display it. Do not use reverse() method.

```
list1=input("Enter list seperated by space")
items=[item.strip() for item in list1.split(" ")]
rev_item=items[::-1]
print(items)
```

Enter list seperated by space kan jan an

['kan', 'jan', 'an', '']

3. Find and display the largest number of a list without using built-in function max(). Your program should ask the user to input values in list from keyboard

```
def find_max(lst):
    if len(lst)!=0:
        max_num = lst[0]
        max_num = lst[0]
        for a in lst:
            if a > max_num:
                max_num = a
        print(max_num)
    else:
        print("Empty list")

lst=input("Enter numbers").split()
find_max(lst)
```

Enter numbers 12 234

234

4. Write a program that rotates the element of a list so that the element at the first index moves to the second index, the element in the second index moves to the third index, etc., and the element in the last index moves to the first index.

```
list2=input("Enter list")
elem=list2[-1]
for n in range(len(list2)-1):
    list2=list2[1:] + list2[0]
print(list2)
```

Enter list hammad

dhamma

5. Write a program that input a string and ask user to delete a given word from a string

```
def del_wrd(txt, wrd):
    if wrd in txt:
        txt=txt.replace(wrd, "")
        return txt.lstrip()

txt=input("Enter text")
print(txt)
wrđ=input("Enter the word you want deleted from the text")
del_wrd(txt, wrđ)
```

Enter text i am hammad i am learning

i am hammad i am learning

Enter the word you want deleted from the text i

'am hammad am learnng'

6. Write a program that reads a string from the user containing a date in the form mm/dd/yyyy. It should print the date in the form March 12, 2021.

```
mon={1:'Jan',
2:'Feb',3:'March',4:'April',5:'May',6:'June',7:'July',8:'Aug',9:'Sep',
10:'Oct',11:'Nov',12:'Dec'}
date=input("Enter date in format mm/dd/yy").split("/")
print(f"{mon.get(int(date[0]))} {date[1]}, {date[2]}")
```

Enter date in format mm/dd/yy 12/13/2024

Dec 13, 2024

7. Write a program with a function that accepts a string from keyboard and create a new string after converting character of each word capitalized. For instance, if the sentence is "stop and smell the roses." the output should be "Stop And Smell The Roses"

```
string1=input("Enter string")
new_str=string1.title()
print(new_str)
```

Enter string stop and smell the roses

Stop And Smell The Roses

8. Find the sum of each row of matrix of size m x n. For example for the following matrix output will be like this :

```
m=int(input("Enter number of rows: "))
n=int(input("Enter number of columns: "))
matrix=[]
for i in range(m):
    while True:
        print(f"Enter {n} elements for row {i + 1}, separated by spaces:")
        row=list(map(int, input().split()))
        if len(row)==n:
            matrix.append(row)
            break
        else:
            print(f"Error! You must enter exactly {n} elements. Try again.")
    print("\nSum of each row:")
for row in matrix:
    row_sum=sum(row)
    print(row_sum)
```

Enter number of rows: 4

Enter number of columns: 3

Enter 3 elements for row 1, separated by spaces:

22 44 23

Enter 3 elements for row 2, separated by spaces:

12 33 43

Enter 3 elements for row 3, separated by spaces:

12 21 23

Enter 3 elements for row 4, separated by spaces:

12 33 56 76

Error! You must enter exactly 3 elements. Try again.

Enter 3 elements for row 4, separated by spaces:

12

Error! You must enter exactly 3 elements. Try again.

Enter 3 elements for row 4, separated by spaces:

12 13 34

Sum of each row:

89

88

56

59

9. Write a program to add two matrices of size  $n \times m$ .