# 1.Python program to check whether the given number is even or not.

a = int(input())

if (a%2 == 0):

print("EVEN")

else:

print("NOT EVEN")

# 2. Python program to convert the temperature in degree centigrade to Fahrenheit.

c =float(input())

f =(c\*9/5)+32

print(f)

#3. Python program to find the product of a set of real numbers.

product = 1

count = int(input())

for i in range(count):

x = float(input()

product = product \* x

print(product)

#4. Python program to find the factorial of a number using recursion.

def fac(n):

if n==0:

return 1

else:

return n\*fac(n-1)

m= int(input())

result = fac(m)

print(result)

#5. Python program to implement linear search.

arr = [1,2,3,4,5,6]

x = 5

def search(arr, x):

for i in range(len(arr)):

if arr[i] == x:

return i

return -1

print("Index ",search(arr, x))

#6. Python program to implement binary search

def binary\_search(arr, low, high, x):

if high >= low:

mid = (high + low) // 2

if arr[mid] == x:

return mid

elif arr[mid] > x:

return binary\_search(arr, low, mid - 1, x)

else:

return binary\_search(arr, mid + 1, high, x)

else:

return -1

arr = [ 10, 20, 30, 35, 40 ]

x = 20

result = binary\_search(arr, 0, len(arr)-1, x)

if result != -1:

print("Element is present at index", result)

else:

print("Element is not present in array")

#7. Python program to find the largest number in a list without using built-in functions

l = []

n = int(input("Enter List Length: "))

for i in range(n):

e = int(input("Enter the List: "))

l.append(e)

l.sort()

print("List =", l)

print("Largest element is:", l[-1])

# 8. Python program to delete an element from a list by index

l = [1,2,3,4,5,6,7,8,9]

del l[4]

print(l)

# 9.Python program to print all the items in a dictionary

dicta = {'Bharani':50, 'Gupta':90,'Arul':40,'Raghul':60}

for value in dicta.values():

print(value)

# 10.Sum and average of 10 numbers

sum=0

for i in range(1,11,1):

num= int(input("Please enter the 10 integers : "))

sum = sum+num

print("sum = ",sum)

print("average = ",sum/10)