#ans.1

a = input("Give input: ")

def reverse(a):

result=a.split(" ")

for char in result:

char =char[::-1]

result=" ".join(char)

print(result, end=" ")

reverse(a)

#ans.2

class answer(object):

def add(s, n, t):

ans = [ ]

for a in range(len(n) - 1):

for b in range(a + 1, len(n)):

c = n[a] + n[b]

if c == t:

ans.append((a, b))

return ans

print(answer().add([1,2,3,4], 7))

#ans.3

num = input("enter a number: ")

def main():

if num == num[::-1]:

print("yes, it is a palindrome")

else:

print("no, it is not a palindrome")

main()

#ans.4

def longest\_Common\_Prefix(str1):

if not str1:

return ""

short = min(str1,key=len)

for i, char in enumerate(short):

for other in str1:

if other[i] != char:

return short[:i]

return short

print(longest\_Common\_Prefix(["michael", 'michelle', "mitch"]))

#ans.5

import math

n = int(input("Enter the number of terms: "))

pi = 0

for r in range(n):

term = ((-1) \*\* r) \* (4 / (2 \* r + 1))

pi += term

print("The calculated value of pi =", pi)

print("Actual pi value =", math.pi)

print("Difference =", math.pi - pi)

#ans.6

import math

def newton\_method(x,step):

p=1

guess = x/2

while p <= step:

guess = (guess + (x/guess)) / 2

p+=1

return guess

value = newton\_method(16, 4)

print (value,'\nThe required difference between them is : ', value - (math.sqrt(10))) #ans.6

import math

def newton\_method(x,step):

p=1

guess = x/2

while p <= step:

guess = (guess + (x/guess)) / 2

p+=1

return guess

value = newton\_method(16, 4)

print (value,'\nThe required difference between them is : ', value - (math.sqrt(10)))