1. What will be the output of below code –

(a) str="hello"
    str[:2]
	(b) str='Hello'
	    res=''
	    for i in range(len(str)) :
	        res=res+str[i]
	        print(res)

(c) s = 'Hi!'
    s1 = 'Hello'
    s2 = s[:2] + s1[len(s1) - 2:]
    print(s2)
	(d) a='hello'
	    b='virat'
	    for i in range(len(a)) :
	        print(a[i],b[i])

(e) s="learning is fun"
    n = len(s)
    m=' '
    for i in range(0, n):
        if(s[i] >= 'a' and s[i] <= 'm'):
            m = m + s[i].upper()
        elif(s[i] >= 'n' and s[i] <= 'z'):
            m = m + s[i-1]
        elif (s[i].isupper()):
            m = m + s[i].lower()
        else:
            m = m + '#'
    print(m)
	(f) a = (5, (10, (30, (40,))))
	    print(len(a))
	    print(a[1][0])
	    print(10 in a)
	    b = (100,(200,(300,),400),500)
	    print(len(b))
	    print(len(b[1]))
	    print(b[0]+500)

2. Write a Program to Count the Number of Vowels in a String.
3. Write a Program to Check if a String is a Palindrome or Not.
4. Write a program to input a list and multiple every odd number with 3 and divide every even number by 2.
5. Write a program to input a list L1 and copy all numbers divisible by 7 to another list L2.