1. write program defines a BankAccount class with methods for deposit, withdrawal, and checking the account balance2. print pattern 1 1 1 1 2 1 1 3 3 1 1 4 6 4 13. Write a function to check if two strings are anagrams eg: string1 = "Listen" string2 = "Silent" result =TRUE4. find the most repeated letter and its count in the given string input:ababcababc5. Write a function to merge two sorted lists into a new sorted list. without inbuilt functions list1 = [1, 3, 5, 7] list2 = [2, 4, 6, 8] Merged and Sorted List: [1, 2, 3, 4, 5, 6, 7, 8]6. write a python program to find out common letters between two strings(without using inbuilt function)7. input-[1,2,3,4,5,6,7,8,9,10]output-[1,2,3,4,5,10,9,8,7,6]8. E D E C D E B C D EA B C D E9. Write a program that generates a list of 20 random numbers between -50 and 50, and then prints out the sum of all the positive numbers in the list using a for loop and an if condition10 . Write a Python program to calculate the sum of the positive and negative numbersof a given list of numbers using the lambda function.11. Create a list and sort them in descending order. Calculate the sum of the differences between consecutive elements in the sorted array.12. Add 2 numbers with out using '+' operator13. 0 2 4 4 8 88 16 16 1614 . print the first non repeated character in a string15.print the pattern13 26 5 410 9 8 716. string="python@34%^&count the letters,digits,and special charators in the string.(without using inbuilt function)17. Write a Python program that uses a "while" loop to repeatedly ask the userto input a number until they input a negative number, and then prints out the sum of all the positive numbers they entered.18. Write a Python function to check if a given number is a Fibonacci number. 19 .palindrome in oops approach20. print13 57 9 11 13 15 17 19 21 23 25 27 2922. print the patternsEnter the number of rows: 66 5 4 3 2 1 5 4 3 2 1 4 3 2 1 3 2 1 2 1 11 3 3 5 5 5 7 7 7 7 9 9 9 9 9Enter the number of rows: 51 2 3 4 5 2 2 3 4 5 3 3 3 4 5 4 4 4 4 5 5 5 5 5 511 01 0 01 0 0 01 0 0 0 0 1 2 1 4 2 1 8 4 2 1 16 8 4 2 1 32 16 8 4 2 1 64 32 16 8 4 2 1 128 64 32 16 8 4 2 1 23. .Write a function that takes a string as input and returns a dictionary with the frequency of each wordeg:text = "This is a sample text. This text is just an example."Word Frequency: {'This': 2, 'is': 2, 'a': 1, 'sample': 1, 'text.': 1, 'text': 1, 'just': 1, 'an': 1, 'example.': 1}24. input--'sky is blue'output--'blue is sky'(without using inbuilt function)25. --->write a python program to find out common letters between two strings(without using inbuilt function)1-NAINA2-REENE26. Given a string Extract all the numbers in the string and return the numbers as a listinput-str='Nancy is 90 years old. she wants 12.5 toffees'27.Python program that demonstrates polymorphism using an abstract class and abstract methods n=[30,20,40]m=[5,12,8]b=60{n:40 , m: 12 , b:52}Longest and Shortest WordsGiven the list of words below ..word\_list = ["apple", "airplane", "carrot", "elephant", "guitar", "moonlight"]print pattern 1 2 3 4 5 6 7 8 9Python program to print non-repeating letters from stringa = "axacrtyeacx"String = "Malayalam"print the character and count in a dictionary for repeated characters only Write a Python function that reads a text file and counts the number of occurrences of each word in the file. The function should return a dictionary where the keys are words and the values are the counts. s="HELLO FRIENDS" print the repeated characters as dictionary without using build in functions print pattern1 2 1 3 2 1 4 3 2 1 5 4 3 2 1 10 9 8 7 6 5 4 3 2 11 2 4 3 6 9 4 8 12 16 5 10 15 20 251 1 2 1 1 2 3 2 1 1 2 3 4 3 2 1 1 2 3 4 5 4 3 2 1Create a list and sort them in descending order. Calculate the sum of the differences between consecutive elements in the sorted array. arr=[2,10,1,15,6]after sort [15,10,6,2,1](15-10)+(10-6)+(6-2)+(2-1)sum =14[-1,7,5,4,2,1]find the smallest positive number not in this list