Week-1

1.

Step-1: START

Step-2: Input a String values and store in input value

Step-3: Declare new String variable reverse

Step-4: Declare I as length of input values

Step-4: for loop until j is equal to the 0

reverse=reverse+inputvalue.charAt(i)

j--

next loop

Step-5: OUTPUT reverse

2.

Step-1: START

Step-2: Declare array as mainArray

Step-3: DECLARE array duplicateArray [length. mainArray]

Step-4: DECLARE temp, a=0, b=a+1

Step-5: for loop until a is less than mainArray. length

temp=mainArray[a]

for loop until j is less than mainArray. length

if temp=mainArray[a+1]

OUTPUT temp

b++

next loop

a++

next loop

Step-6: END

Week-2

3.

Step-1: Declare firsts polynomial as arr1 [2,3,5,6]

Step-2: Declare second polynomial as arr2 [5,6,4,3]

Step-3: Declare third array as add [arr1.length]

Step-4: Declare j=0

Step-4: for loops until j is less than size of arr1

sum[j]=arr1[j]+arr2

j++

next loop

Step-5: output add

Step-6: End

1. Step 1: START

Step 2: INPUT num

Step 3: DECLARE remainder, reverseNumber=0

Step 4: while loop until number is equal to 0

remainder =number%10

reverseNumber=reverseNumber\*10+rem

num=num/10

Step 5: if(num=reverseNumber)

DISPLAY (“The given number is palindrome”)

Else

DISPLAY (“The given number isn’t palindrome”)

Step 6: END

The time complexity of this program is 0(n)