1) Write an algorithm to swapping of two numbers without using third varaiable  
Step 1: Start  
Step 2: Declare variables a and b.   
Step 3: Read values a and b.

Step 4: Add a and b and assign the result to a.

a=a+b

Step 5: Subtract a and b and assign the result to b.  
        b=a-b

Step 6: Subtract a and b and assign the result to a.  
        a=a-b   
Step 7: Display a and b   
Step 8: Stop

2) Write an algorithm to find whether given string is palindrome or not  
Step 1: Calculate the length of the string

Step 2: Declare varaiables i and j

Step 3: Assign 0 to i and String length minus one to j

i=0,j=stringlength-1

Step4:WHILE(i<j)   
          IF(Str[i]!=Str[j])  
             R=0  
             Return notpalindrome.  
          EndIf  
          i=i+1  
          j=j-1  
       EndWhile  
Step 5: Return Palindrome.

3)Algorithm to Identify a Prime number:

Step 1: Start

Step 2:Declare variable x

Step 3:Declare a function which takes a parameter

Step 4:within the function place a if loop which checks whether x is divisible by 2 or not

Step 5:if it is not divisible it displays not a prime when the function is called with arguments

Step 6:Stop

4)Algorithm to find the smallest number in a group of members:

Step1:Start

Step2:Declare a array with data type integer.

Step3:Enter the size of the Array.

Step4:Take the values from keyboard by iterating input reader statement.

Step5:Assign first element of an array to variable called minimum.

Step6:Check all the values with minimum variable by using if condition.

If(array[i]<minimum)

Step7:If the value in the array is less than the minimum variable then replace that array value in minimum variable .

Step8:Repeat this condition up to the last element in the array by incrementing the array index.

Step9:At last we get the minimum value in the group.

Step10:Stop