TASK1:

Step1: Start

Step2: Input Map and points

Suppose user select point ‘a’ starting point and ‘b’ ending point

Step3: Select starting point a and check how many paths are connected to point ‘b’

Step4: Check if there is no any path b/w selected points print there is no any path and terminate the program

Step5: Compare one by one path using greater and lesser operator

Step6: If found any path which has least distance print path name and total distance b/w points

Step7: If found more than one path has shortest distance, print path’s name and one total distance

Step8: End

Task2

Step1: Start

Step2: Take input numbers form user

Step3: Check if input is empty, terminate the program

Step4: If the number is input in only one number then print it and terminate the program

Step5: If the numbers are greater than one then compare numbers one by one

Step6: Select first number and compare with second number if first number is greater than second

Number then swap up number and select second number

Step7: If second number is greater than first number, leave the first number and select the second

Number

Step8: Compare second number next number of the number

If Second number is greater than next of number then swap up numbers and select next number

If Second number is less than next of number then select the next number

Step9: Similarly check number by number and swap up if needed

Step10: If there is no any number left which needs to be compare with previous selected number

Step11: Select the first number and compare with next of number, swap up numbers where it needs

Step12: When selecting the first number check is last number is equal to next number

If it equals print the number and exit the program

Else keep comparing and swap up until next of first number is previous last number

Step13: End

TASK3:

Step1: Start

Step2: Take input from user how much you want to fabonic series

Step3: Check entered number is greater than equal to zero

If number is less than 0, print invalid number and terminate the program

Else go to Step4

Step4: If number is equal to 0, print 0

If number is equal to 1, print 1;

Step5: If number is greater than 1,

Use F(n) = F(n-1)+F(n-2)

Where F(0) = 0, F(1)=1

If n=2:

F(2) = F(1)+F(0)

n=3:

F(3) = F(2)+F(1)

n=4:

F(4) = F(3) + F(2)

Respectively for n:

F(n) = F(n-1)+ F(n-2)

Step6: print Fabbonic Series

Step7: End

TASK4

Step1: Start

Step2: Take Input form User

Enter 1 for adding items

Enter 2 for removing items

Enter 3 for Update Quantity

Enter 4 for generate Report

Enter 5 for Quit

Step3: Check if entered number is b/w 1-5

If not print message you have entered incorrect number and redirect to Step 2

1. Step4:

   Input: Enter Name of item
   Enter price of item
   Enter quantity of item

   Check if every thing is provided if something is missing print message that you haven't provide that thing and redirect to input

   If everything if provided then check is any item available in the inventory with this name if available print message to item is already available Do you want to update Quantity or add another item

   Input: Add item or update Quantity

   Check if add item is entered redirect to adding item Step4
   If update quantity is entered redirect to Step 6

   If not available in the inventory then save item and print item added

   Print Do you want to add an other item or Goto main menu or exit
   Input
   If entered add item redirect to Step4
   If entered main menu go to Step2
   If entered exit, terminate the program

2. Step5:

   Input:
   Enter Item name to remove
   Check if entered item is exist nor not
   If not exist print message that Item is not available
   Input: Do you want to remove any item or go to main menu or exit program
   Check if entered remove item go to step5, if entered main menu go to main Menu, if entered exit program, exit the Program
   If Exist then delete the item and print message item removed
   Input: Do you want to remove any item or go to main menu or exit program

Check if entered remove item go to step5, if entered main menu go to main Menu, if entered exit program, exit the Program

3. Step 6:

Input: Enter item name

Find Item

If item not found print item not found

Input: Do you want to rename and update item? Or go to main menu or exit

If entered rename, go to step 6

If entered main menu, go to Step2

If entered exit, terminate the program

If item found:

Input how much you want to add or remove quantities

Add or remove x quantities and print x quantities added or removed

Input: Do you want to update any other item, go to main menu, or exit the program

Check If entered is update other items, redirect to Step6

If entered is go to main menu, redirect to Step2

If entered is exit the Program, terminate the program

4. Step 7:

Input: Enter Item Name to generate Report
Check if entered item is exist nor not
If not exist print message that Item is not available
Input: Do you want to generate another report or go to main menu or exit program
Check if entered generate, go to step7, if entered main menu go to Step2, if entered exit program, exit the Program
If item exist, print item name, remaining quantities, sold quantities.

Input: Do you want to generate an other report or go to main menu or exit the program.
If entered is generate another report, go to Step7
If entered is main menu go to step2
If entered is exit, terminate the program

Step 8: End