1. What will be the value of foo(foo(10)) given the following function definition?

|  |  |
| --- | --- |
| function y=foo(x)  y=x^2;  end |  |

1. What is wrong in the following function implementation? Suggest a fix for it.

function y = myfun(x)

sum=0;

for i=1:10

sum=sum+x(i);

end

end

1. What will be the value of foo1(5) given the following function definitions?

|  |  |
| --- | --- |
| function y=foo1(x)  y=foo2(x\*2);  end  function y=foo2(x)  y= x+5;  end |  |

1. Using only functions in the main script, write a program that reads customers IDs and waiting time from a 2D array and checking if al numbers are positive. The program first calculates the average waiting time. Then it prints the following data on the screen
   * The average waiting time
   * Customer ID for customers who waits for a time longer than the average waiting time.

Your main script should look like:

Id=GetPositiveArray(‘Enter ID:’);

Wait=GetPositiveArray(‘Enter Waiting Time:’);

Avg=ComputeAverage(Wait);

fprintf(‘Average Waiting time = %.2f\n’,Avg);

IdLongWait=GetIDLongWait(Id,Wait,Avg);

disp(‘*Customers who waited longer than average are:’);*

*disp(IdLongWait);*

*Example:*

*Input:*

*Enter ID:[34 12 21 35 78 18]*

*Enter Waiting Time: [15 2 24 32 13 -8]*

*Error! Enter Waiting Time: [15 2 24 32 13 8]*

*Output:*

*Average Waiting Time = 15.7*

*Customers who waited longer than average:*

*21 35*

4. Using only functions in the main script, write a program that reads the departure time and the trip time of n trains as two 2D array and calculate the arrival time of each train (assume no trip spans over two days). Your program should check that entered data are within valid ranges, i.e., HH is between 0 and 23, MM is between 0 and 59.

Your main script should look like:

dt = GetTimeArray(‘Enter Departure Time:’);

tt = GetTimeArray(‘Enter Trip Time:’);

at=AddTimeArray(dt,tt);

DisplayTimeArray(‘Arrival Time ’);

Example:

>>

Enter Departure Time: [5 20; 8 -10]

Error! Enter Departure Time: [5 20; 50 10]

Error! Enter Departure Time: [5 20; 8 10]

Enter Trip Time: [4 10; 1 66]

Error! Enter Trip Time: [-4 10; 1 55]

Error! Enter Trip Time: [4 10; 1 55]

Arrival Time:

09:30

10:05