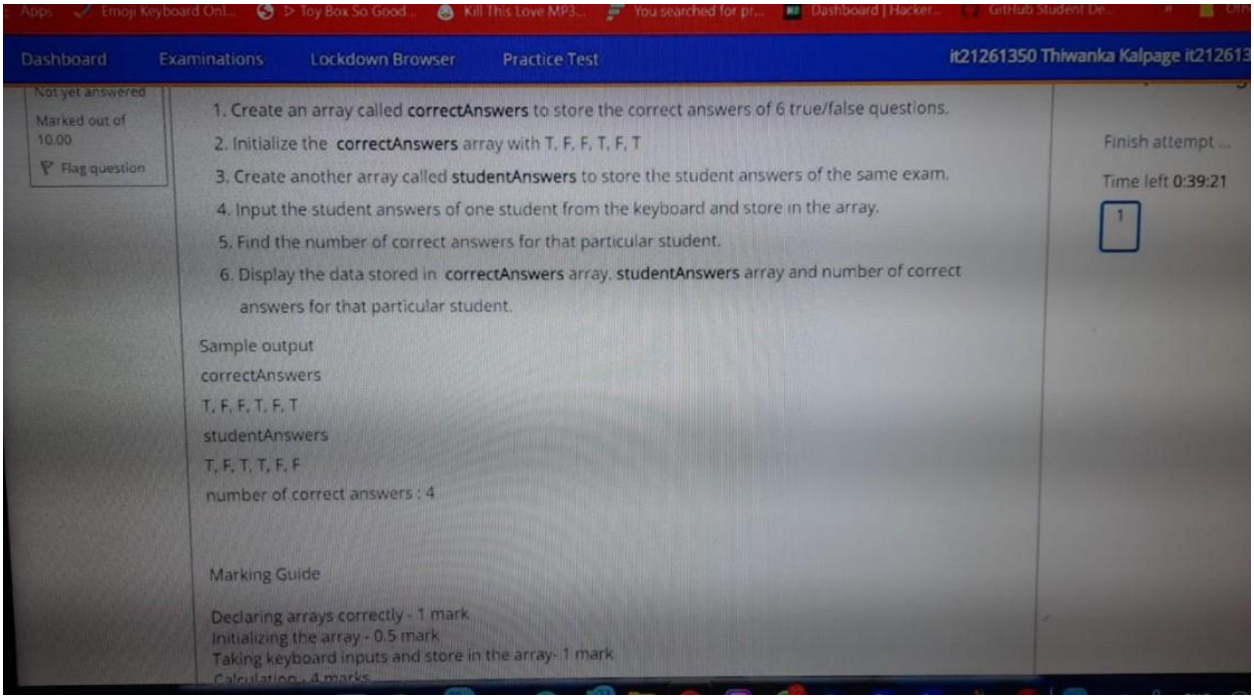
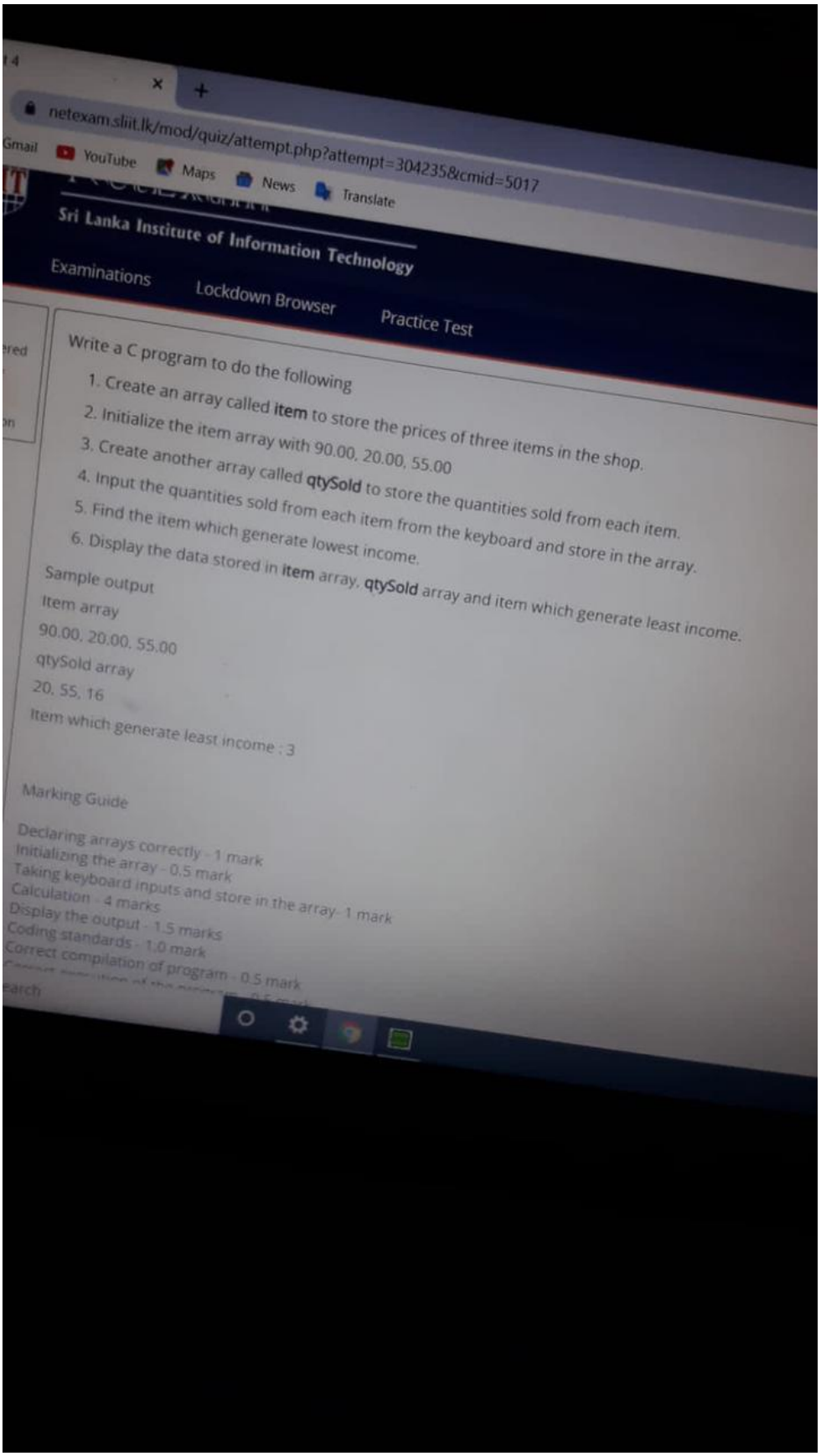



```
#include <stdio.h>
#define size 6

int main (void)
{
	char correctAnswer[size] = {'T' , 'F' , 'F' , 'T' , 'F' , 'T'};
	char studentAnswer[size] ;
	int count = 0 , i;

	for (i = 0 ; i < size ; i ++)
	{
		printf("%d answer : " , i+1);
		scanf(" %c" , &studentAnswer[i]);
	}

	printf("\ncorrectAnswers\n\n");

	for (i = 0 ; i < size ; i ++)
	{
		printf("%c  " , correctAnswer[i]);

	}

	printf("\n\nstudentAnswers\n\n");
```

```
	for (i = 0 ; i < size  ; i ++)
	{
		printf("%c  " , studentAnswer[i]);

	}

	for (i = 0 ; i < size ; i ++)
	{
		if (correctAnswer[i] == studentAnswer[i] )
		{
			count++ ;
		}
	}

	printf("\n\n number of correct Answers : %d" , count);

	return 0 ;
}
```


netexam.sliit.lk/mod/quiz/attempt.php?attempt=304235&cmid=5017
Gmail
YouTube
Maps
News
Translate
Sri Lanka Institute of Information Technology
Examinations
Lockdown Browser
Practice Test
Write a C program to do the following
1. Create an array called item to store the prices of three items in the shop.
2. Initialize the item array with 90.00, 20.00, 55.00
3. Create another array called qtySold to store the quantities sold from each item.
4. Input the quantities sold from each item from the keyboard and store in the array.
5. Find the item which generate lowest income.
6. Display the data stored in item array, qtySold array and item which generate least income.
Sample output
Item array
90.00, 20.00, 55.00
qtySold array
20, 55, 16
Item which generate least income : 3
Marking Guide
Declaring arrays correctly - 1 mark
Initializing the array - 0.5 mark
Taking keyboard inputs and store in the array- 1 mark
Calculation - 4 marks
Display the output - 1.5 marks
Coding standards - 1.0 mark
Correct compilation of program - 0.5 mark

```
#include <stdio.h>

int main (void)
{
	float item[3] = {90.00 , 20.00 , 55.00} ;
	float least_income = 0;
	int qtySold[3] , i ;
	int total = 0 , count ;

	for (i = 0 ; i < 3 ; i++)
	{
		printf("input item %d sold quanities :" , i+1);
		scanf("%d" ,&qtySold[i] );
	}

	printf("item array \n" );

	for (i = 0 ; i < 3 ; i++)
	{
		printf("%2.2f , " , item[i]);
	}

	printf("\n\nqtySold array \n" );

	for (i = 0 ; i < 3 ; i++)
	{
		printf("%2d , " , qtySold[i]);

	}
	least_income = item[0] * qtySold[0] ;
	for (i = 0 ; i < 3 ; i++)
	{
		total = qtySold[i] * item[i] ;

		if (total < least_income )
		{
			count = i+1 ;
		}
	}

	printf("\n\nItem which genarate least income : %d" , count);
	return 0 ;
}
```

Write a C program to do the following

1. Create an array called **OTHours** to store the number of OT hours worked by five employees.
2. Initialize the **OTHours** array with 20, 22, 25,19, 20.
3. Create another array called **OTrate** to store the OT rate of each employee in order.
4. Input the OT rate of each employee from the keyboard and store in the array.
5. Find the employee who earned highest payment.
6. Display the data stored in **OTHours** array, **OTrate** array and employee who earned highest payment.

Sample output

OTHours array

20, 22, 25,19, 20

OTrate

200.00, 100.00, 150.00, 300.00, 200.00

employee who earned highest payment: 4

Marking Guide

Declaring arrays correctly - 1 mark
Initializing the array - 0.5 mark
Taking keyboard inputs and store in the array- 1 mark
Calculation - 4 marks
Display the output - 1.5 marks
Coding standards - 1.0 mark
Correct compilation of program - 0.5 mark
Correct execution of the program - 0.5 mark

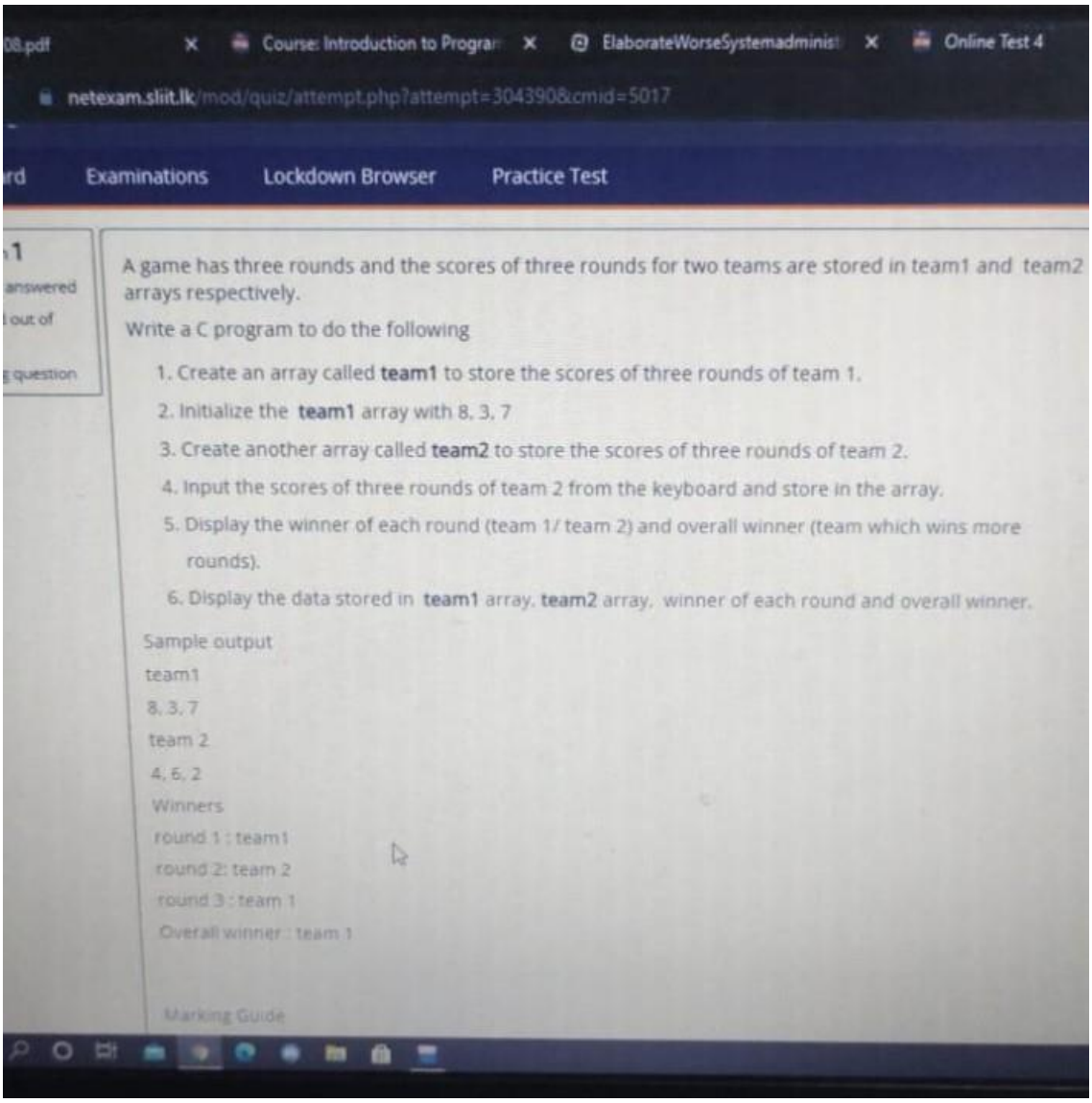
Maximum size for new files: 30MB, maximum attachments: 1

Files

e here to search

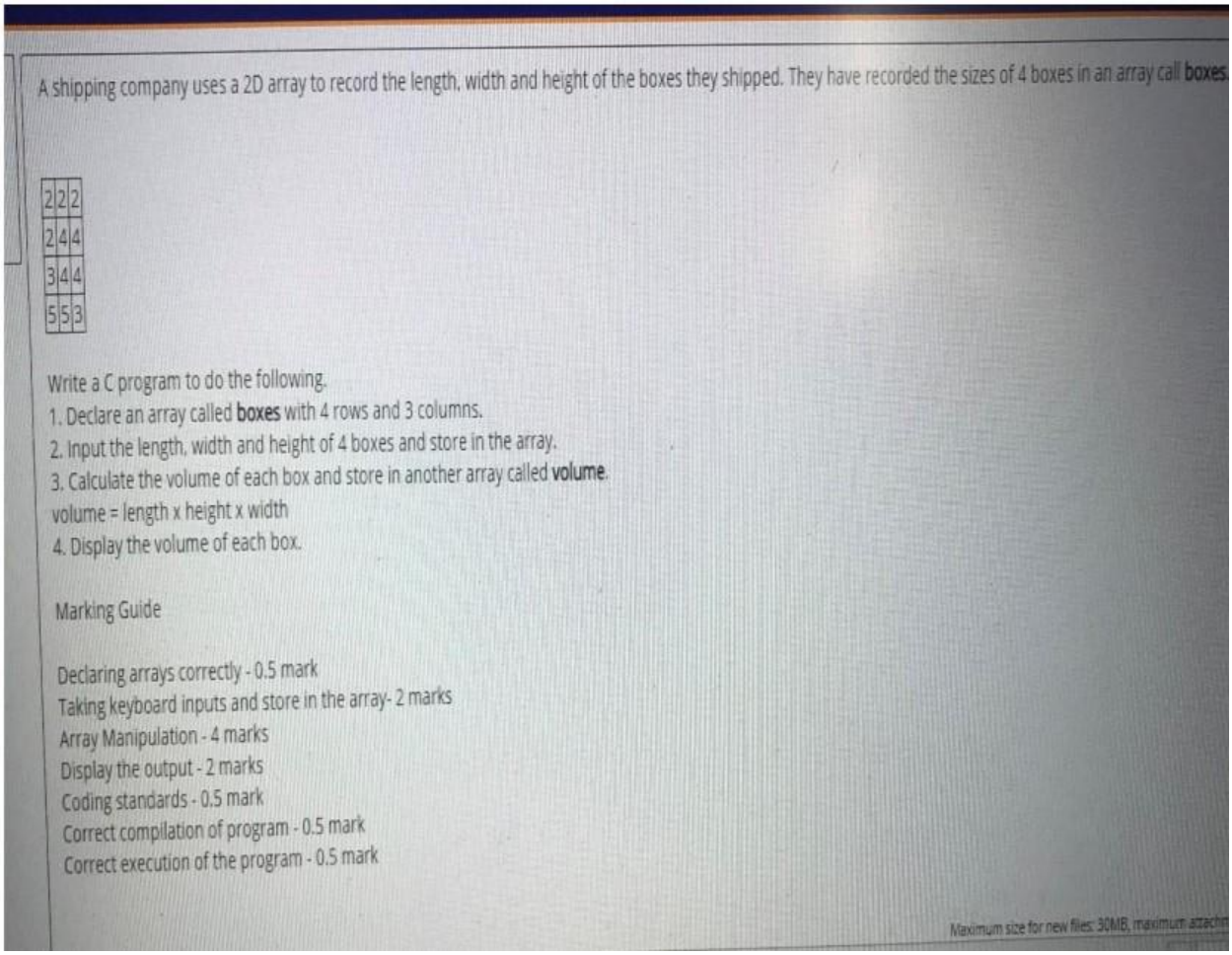
```
#include <stdio.h>
#define size 5

int main (void)
{
	int OTHours[size] = {20 , 22 , 25 , 19 , 20 } ;
	float OTrate[size]  ;
	float h_payment = 0 , payment = 0;
	int  count , i ;


	for (i = 0 ; i < size ; i++)
	{
		printf("input the OT rate of %d employee : " , i+1);
		scanf("%f" ,&OTrate[i] );
	}

	printf( "\nOTHours array \n\n" );

	for (i = 0 ; i < size ; i++)
	{
		printf("%2d  " , OTHours[i]);
	}

	printf("\n\nOTrate \n\n" );

	for (i = 0 ; i < size ; i++)
	{
		printf("%2.2f  " , OTrate[i]);
	}
	h_payment = OTHours[0] * OTrate[0] ;

	for (i = 0 ; i < size ; i++)
	{
		payment  = OTHours[i] * OTrate[i] ;

		if (h_payment < payment  )
		{
			count = i+1 ;
		}
	}

	printf("\n\nemployee who earned higest payment : %d" , count);
```

```
	return 0 ;
}
```




```
#include <stdio.h>
#define size 3

int main (void)
{
	int team1[size] = {8 , 3 , 7} ;
	float least_income = 0;
	int team2[size] , i ;
	int total1 = 0 , total2 = 0 ;

	for (i = 0 ; i < size ; i++)
	{
```

```
            printf("team2 round %d score :" , i+1);
            scanf("%d" ,&team2[i] );
        }

        printf("\nteam 1 \n" );

        for (i = 0 ; i < size ; i++)
        {
            printf("%2d  " , team1[i]);
        }

        printf("\n\nteam2 \n" );

        for (i = 0 ; i < size ; i++)
        {
            printf("%2d  " , team2[i]);

        }
        printf("\n\nwinners\n\n" );

        for (i = 0 ; i < size ; i++)
        {
            if (team1[i] > team2[i] )
            {
                printf("round %d : team 1\n" , i+1 );
                total1 += team1[i] ;
            }
            else
            {
                printf("round %d : team 2\n" , i+1 );
                total2 += team2[i] ;
            }
        }

        if (total1 > total2 )
        {
            printf("\nOverall winner : team 1"  );
        }
        else
        {
            printf("\nOverall winner : team 2"  );
        }
        return 0 ;
}
```



A shipping company uses a 2D array to record the length, width and height of the boxes they shipped. They have recorded the sizes of 4 boxes in an array call **boxes**.

2	2	2
2	4	4
3	4	4
5	5	3

Write a C program to do the following.
1. Declare an array called **boxes** with 4 rows and 3 columns.
2. Input the length, width and height of 4 boxes and store in the array.
3. Calculate the volume of each box and store in another array called **volume**.
volume = length x height x width
4. Display the volume of each box.

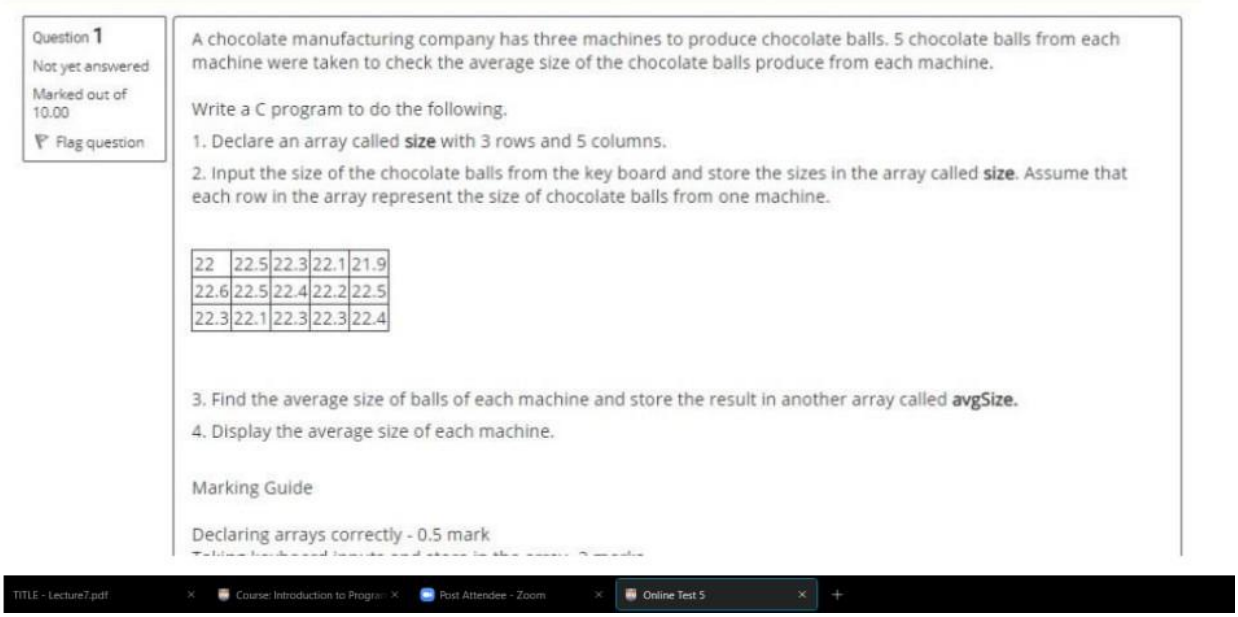
Marking Guide

Declaring arrays correctly - 0.5 mark
Taking keyboard inputs and store in the array- 2 marks
Array Manipulation - 4 marks
Display the output - 2 marks
Coding standards - 0.5 mark
Correct compilation of program - 0.5 mark
Correct execution of the program - 0.5 mark

Maximum size for new files: 30MB, maximum attachm

```
#include <Stdio.h>

int main  (void)
{
        int boxes[4][3] = {0};
        int volume[3] = {0} ;
        int i , j ;

        for (i = 0 ; i < 4 ; i++)
        {
                printf("%d box\n" , i+1);

                printf("input length : ");
                scanf("%d" , &boxes[i][0]);

                printf("input Width : ");
                scanf("%d" , &boxes[i][1]);
```

```
            printf("input height : ");
            scanf("%d" , &boxes[i][2]);

            puts(" ");

        }

        for (i = 0 ; i < 4 ; i++)
        {
            for (j = 0 ; j < 3 ; j++)
            {
                volume[i] +=  boxes[i][j] ;
            }
            printf("%d box volume : %d\n" , i+1 , volume[i]);
        }

        return 0 ;
}
```



Question 1

Not yet answered

Marked out of 10.00

Flag question

A chocolate manufacturing company has three machines to produce chocolate balls. 5 chocolate balls from each machine were taken to check the average size of the chocolate balls produce from each machine.

Write a C program to do the following.

1. Declare an array called **size** with 3 rows and 5 columns.
2. Input the size of the chocolate balls from the key board and store the sizes in the array called **size**. Assume that each row in the array represent the size of chocolate balls from one machine.

22	22.5	22.3	22.1	21.9
22.6	22.5	22.4	22.2	22.5
22.3	22.1	22.3	22.3	22.4

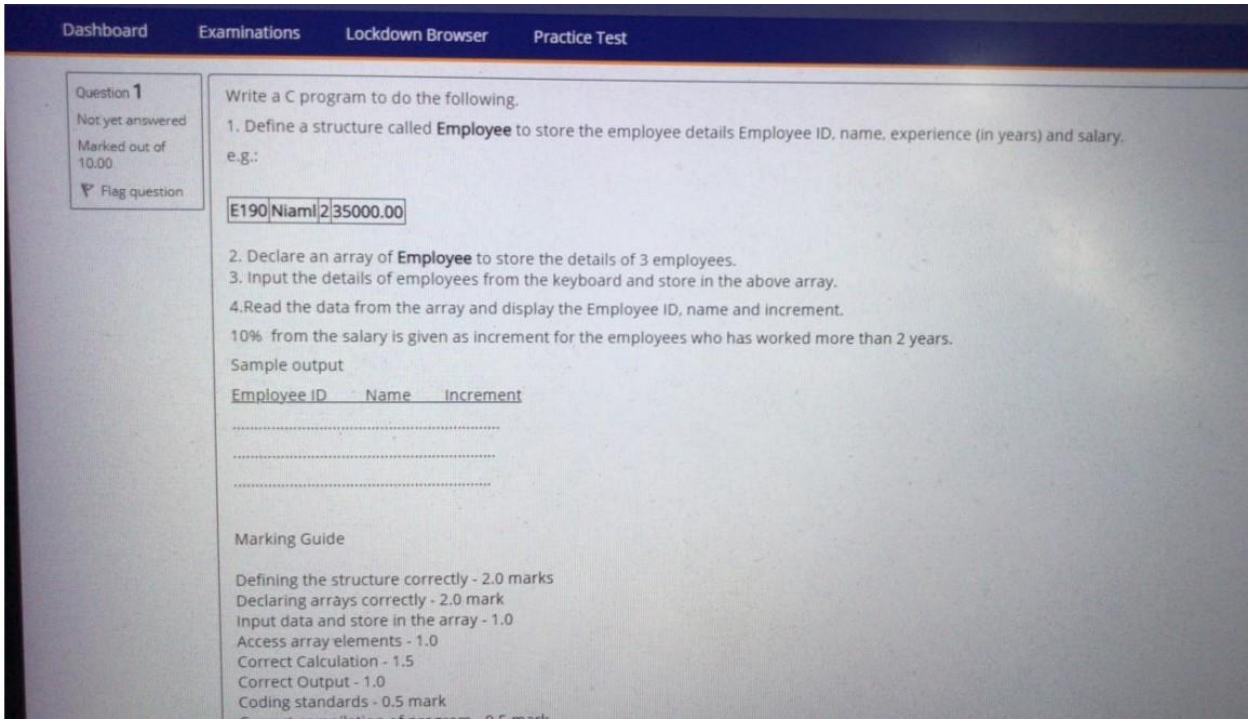
3. Find the average size of balls of each machine and store the result in another array called **avgSize.**
4. Display the average size of each machine.

Marking Guide

Declaring arrays correctly - 0.5 mark


```
#include <stdio.h>

int main (void)
{
        float size [3][5] = {0};
        float avgSize[3] = {0} ;
        int i , j  ;

        for (i = 0 ; i < 3 ; i++)
```

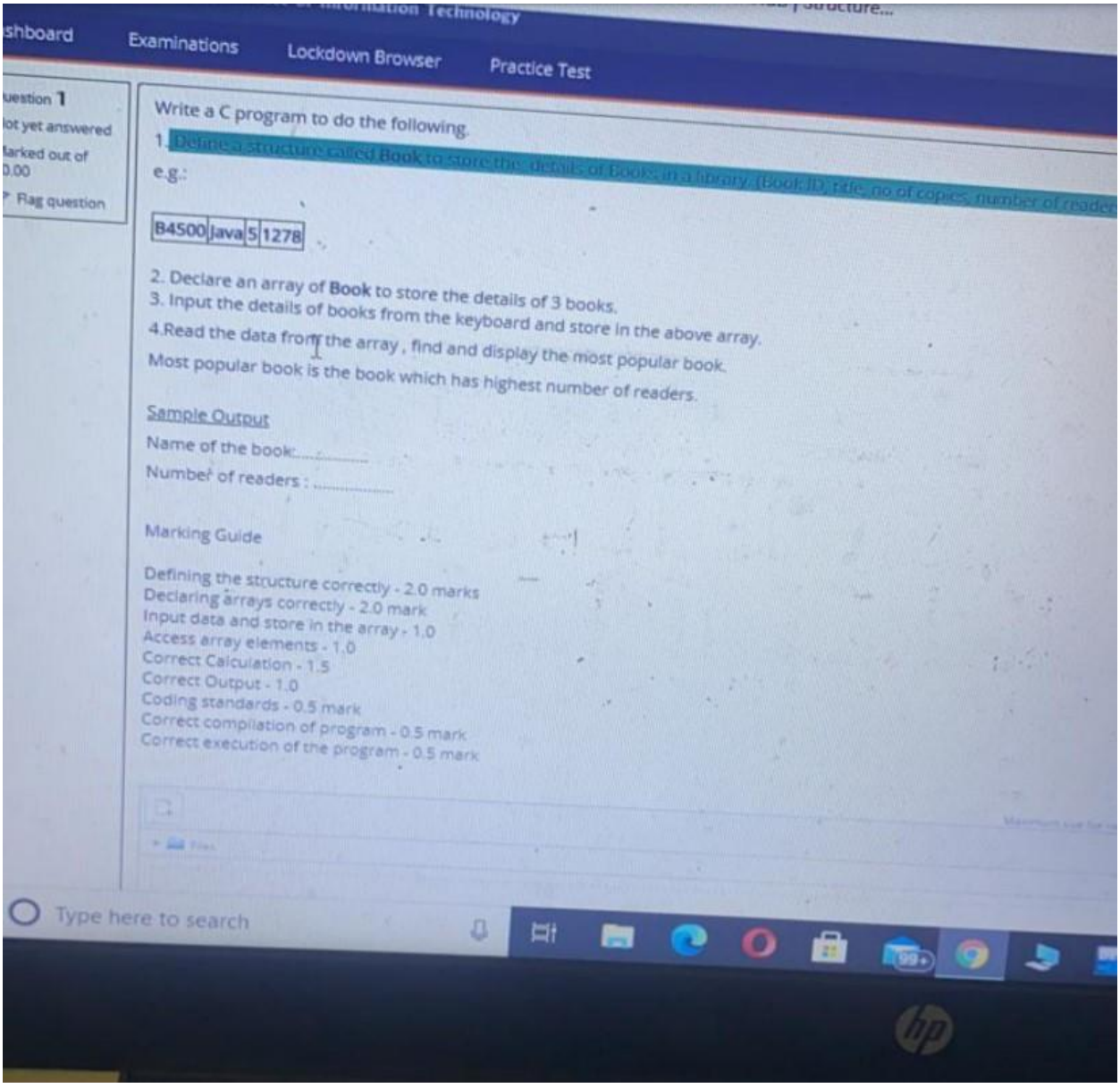
```
        {
                printf("%d machine :\n" , i+1);

                for (j = 0 ; j < 5 ; j++)
                {
                        printf("size of %d chocolate ball : " , j+1 );
                        scanf("%f" , &size[i][j]);
                }
                puts(" ");
        }

        for (i = 0 ; i < 3 ; i++)
        {
                for (j = 0 ; j < 5 ; j++)
                {
                        avgSize[i] += size[i][j] ;
                }

                printf("Avarage size of %d machine : %.2f \n" , i+1 , avgSize[i] / 5.0);
        }

        return 0 ;
}
```




```
#include <stdio.h>
```

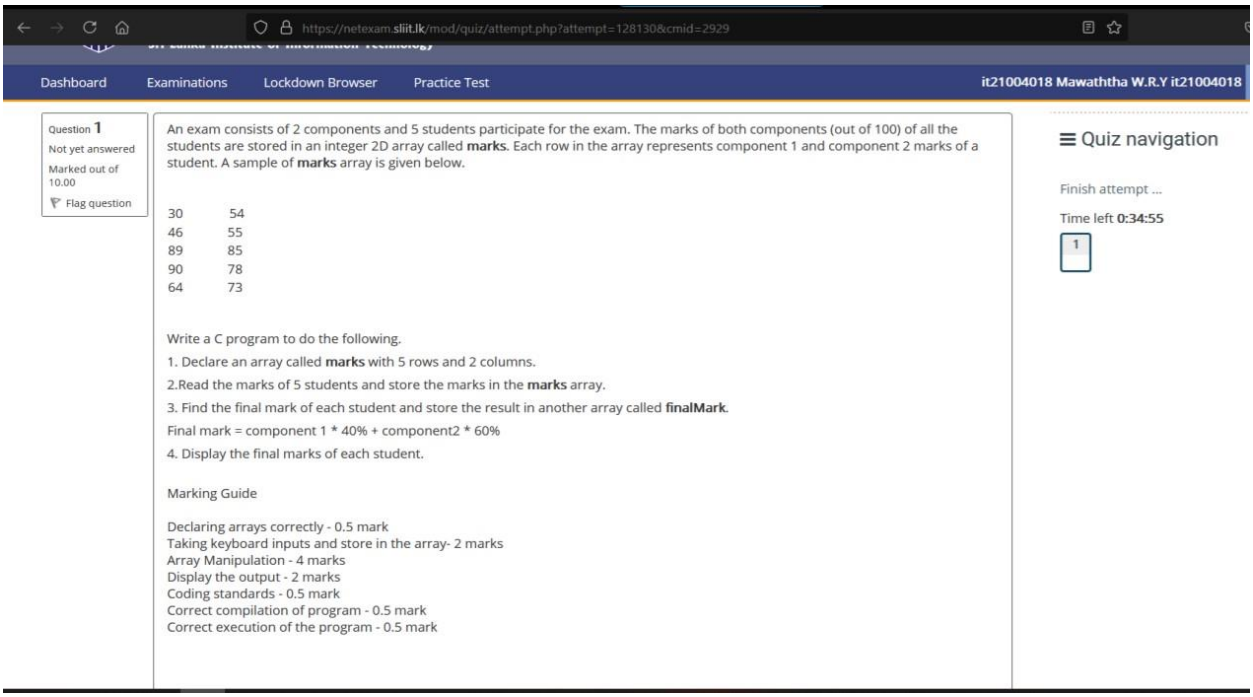
```
   struct Employee
   {
            char EmployeeID[20];
            char name[20];
            int exp ;
            float salary ;
          };

int main (void)
{
          struct Employee Employee[3] ;
          int i ;
          float increment = 0 ;

          for (i = 0 ; i < 3 ; i++)
          {
                    printf("Enter %d Employee ID : " , i+1);
                    scanf("%s" , Employee[i].EmployeeID);

                    printf("Enter %d Name : " , i+1);
                    scanf("%s" , Employee[i].name);

                    printf("Enter experince(in year) : " );
                    scanf("%d" , &Employee[i].exp);

                    printf("Enter %d Salary : " , i+1);
                    scanf("%f" , &Employee[i].salary);

                    puts (" ");
  }

   printf("\nEmpoyee ID \t Name \t\t Increment \n");
          for (i = 0 ; i < 3 ; i++)
          {
                    if (Employee[i].exp > 2)
                    {
                              increment = Employee[i].salary / 100 * 10.0 ;
                    }
                    else
                    {
                              increment = 0 ;
                    }
```

```
                printf("%s \t \t %s \t\t %.2f \n" , Employee[i].EmployeeID , Employee[i].name ,
increment  );
        }

        return 0;
}
```



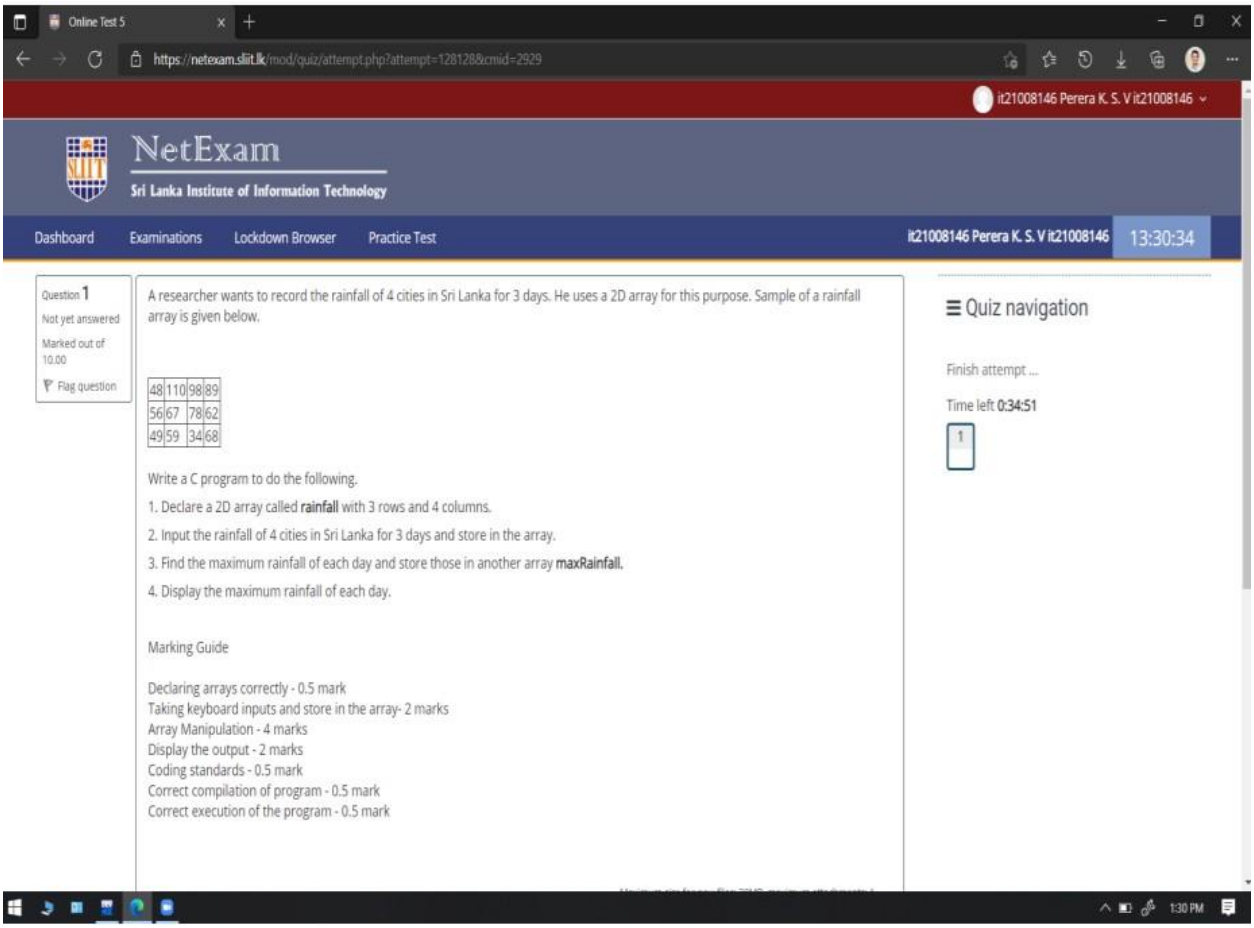

```
#include <stdio.h>
#include <string.h>

        struct Book
        {
```

```
                char BookId[20];
                char title[20] ;
                int copies ;
                int reader ;

        } ;
int main (void)
{
        struct Book Book[3];
        int n , h , i ;
        char popular[20];

        for (i = 0 ; i < 3 ; i++)
        {
                printf("Enter %d Book ID : " , i+1);
                scanf("%s" , Book[i].BookId);

                printf("Enter %d Book title : " , i+1);
                scanf("%s" , Book[i].title);

                printf("Enter no of copies : " );
                scanf("%d" , &Book[i].copies);

                printf("Enter no of reader : ");
                scanf("%d" , &Book[i].reader);

                puts(" ");

        }
        n = Book[0].reader ;
        for (i = 0 ; i < 3 ; i++)
        {
                if (n < Book[i].reader)
                {
                        strcpy(popular , Book[i].title ) ;
                        h = Book[i].reader ;
                }
        }
        printf("\nName of the book : %s\n" , popular);
        printf("Nmber of readers : %d" , h);

        return 0;
}
```



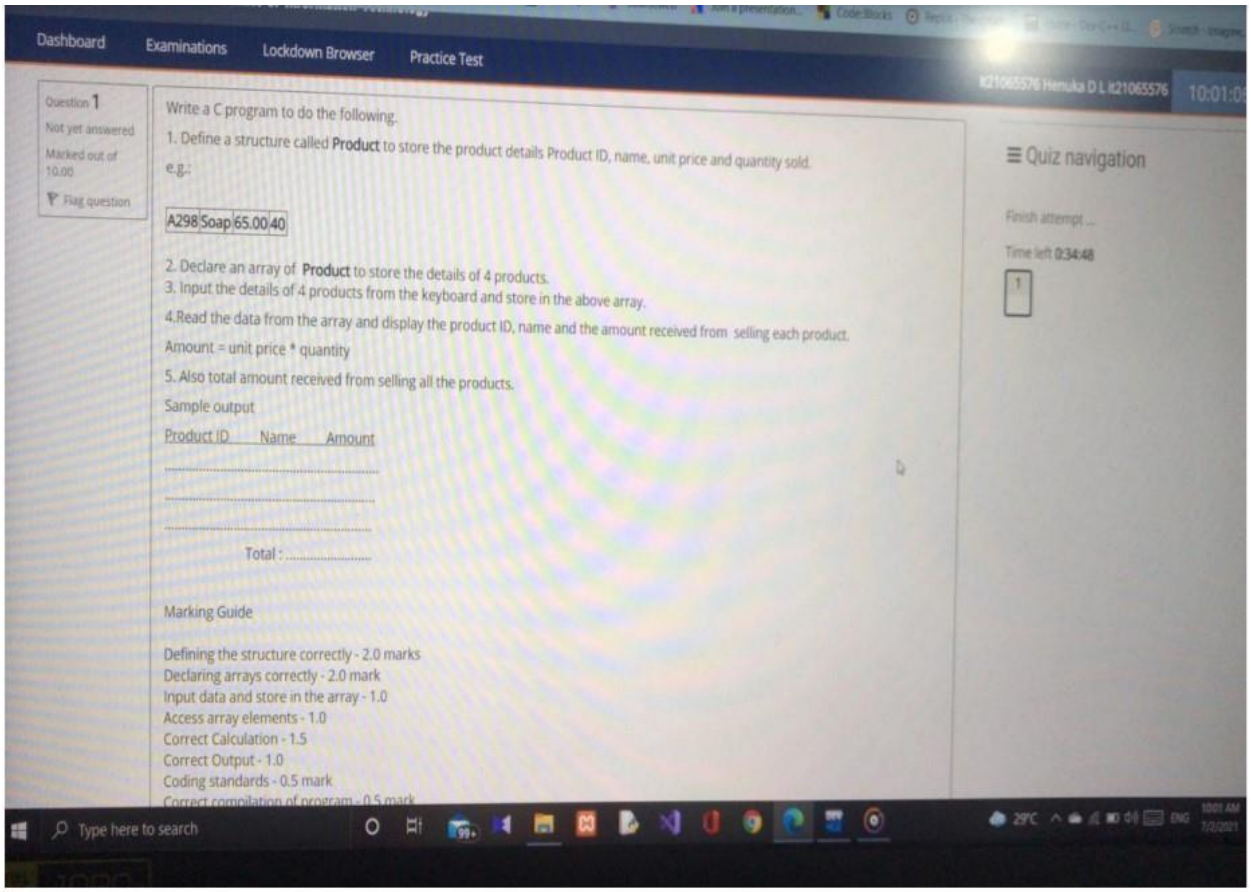

```
#include <stdio.h>
 int main (void)
 {
        int marks[5][2] = {0};
        int finalmarks[5] = {0} ;
        int i ;

        for (i = 0 ; i < 5 ; i++)
        {
                printf("%d student :\n" , i+1);

                printf("Enter component 1 marks : ");
                scanf("%d" , &marks[i][0]);

                printf("Enter component 2 marks : ");
                scanf("%d" , &marks[i][1]);

                puts(" ");
        }

        for (i = 0 ; i < 5 ; i++)
        {
                finalmarks[i] = marks[i][0] * 40 / 100 + marks[i][1] * 60 / 100 ;

                printf("final marks of %d student : %d \n" , i+1 , finalmarks[i]);
```

```
        }

        return 0 ;
}
```



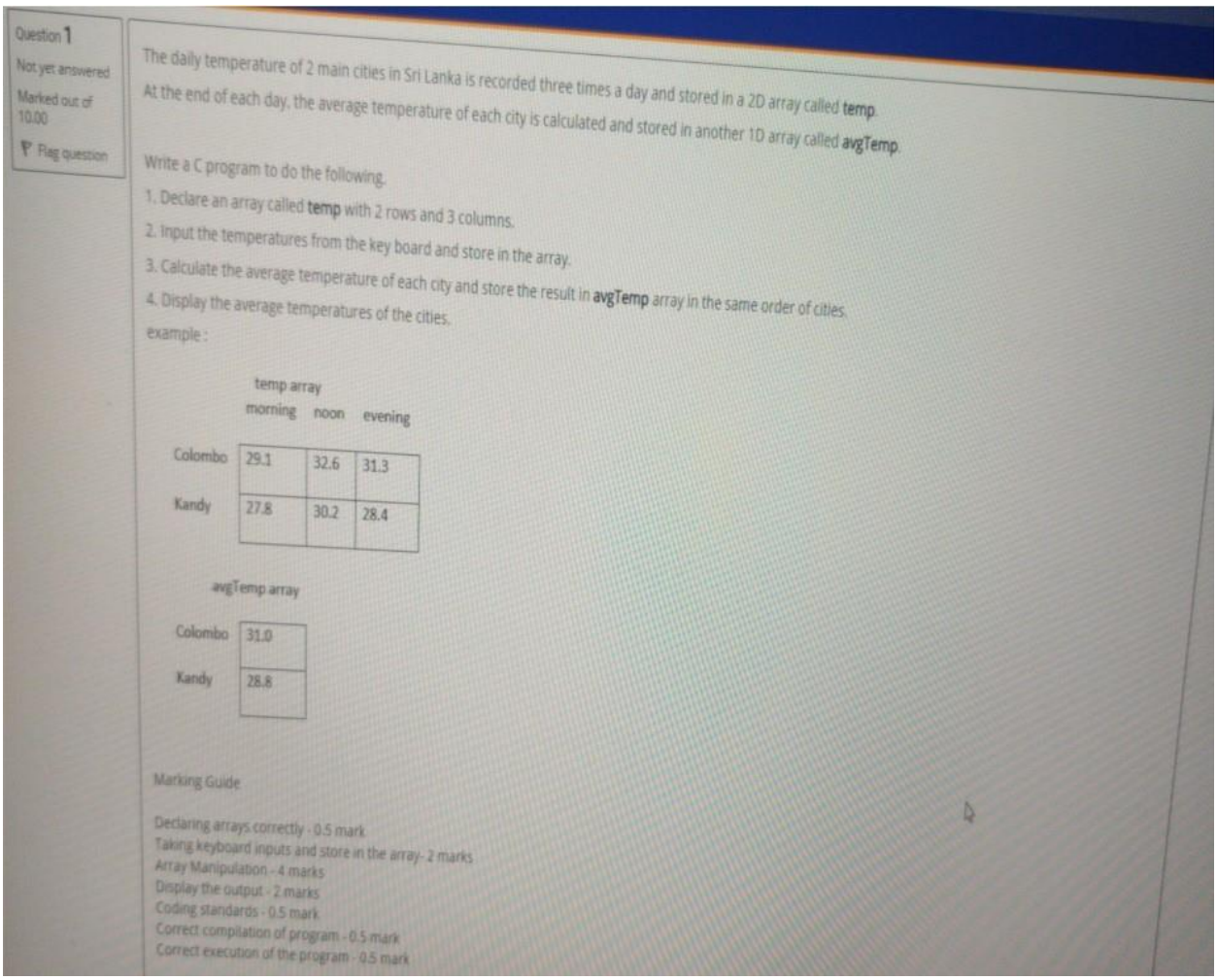

```
#include <stdio.h>

int main (void)
{
        int rainfall[3][4];
        int i , j , max  ;
        int maxrainfall[3];

        for (i = 0 ; i < 3 ; i++)
        {
                printf("%d day  :\n" , i+1);

                for (j = 0 ; j < 4 ; j++)
                {
```

```
                printf("%d city rainfall : " , j+1);
                scanf("%d" , &rainfall[i][j] );
            }
            puts(" ");
        }

        for (i = 0 ; i < 3 ; i++)
        {
            max = rainfall[i][0];

            for (j = 0 ; j < 4 ; j++)
            {
                if(max <= rainfall[i][j])
                {
                    maxrainfall[i] = rainfall[i][j] ;
                }
            }
            printf("\n%d day Maximun rainfall is : %d" , i+1 , maxrainfall[i]);
        }

        return 0 ;
}
```




```
#include <stdio.h>

   struct Product
   {
            char ProductID[20];
            char name[20];
            int quantity ;
            float unitPrice ;
          };

int main (void)
{
          struct Product Product[4] ;
          int i ;
          float amount = 0 , total = 0 ;

          for (i = 0 ; i < 4 ; i++)

          {
                    printf("Enter %d Product ID : " , i+1);
```

```
                scanf("%s" , Product[i].ProductID);

                printf("Enter %d Product Name : " , i+1);
                scanf("%s" , Product[i].name);

                printf("Enter %d Quantity sold : " , i+1);
                scanf("%d" , &Product[i].quantity);

                printf("Enter %d Product unit price : " , i+1);
                scanf("%f" , &Product[i].unitPrice);

                puts (" ");
  }

   printf("\nProduct ID \t Name \t\t Amount \n");
        for (i = 0 ; i < 4 ; i++)
        {
                amount = Product[i].unitPrice * Product[i].quantity ;
                total += amount ;
                printf("%s \t \t %s \t\t %.2f \n" ,Product[i].ProductID , Product[i].name , amount  );

        }
        printf("\t \t\t total : %.2f" , total);
        return 0;
}
```



Question 1

Not yet answered

Marked out of 10.00

Flag question

The daily temperature of 2 main cities in Sri Lanka is recorded three times a day and stored in a 2D array called **temp**.

At the end of each day, the average temperature of each city is calculated and stored in another 1D array called **avgTemp**.

Write a C program to do the following.

1. Declare an array called **temp** with 2 rows and 3 columns.
2. Input the temperatures from the key board and store in the array.
3. Calculate the average temperature of each city and store the result in **avgTemp** array in the same order of cities.
4. Display the average temperatures of the cities.

example :

temp array

	morning	noon	evening
Colombo	29.1	32.6	31.3
Kandy	27.8	30.2	28.4

avgTemp array

Colombo	31.0
Kandy	28.8

Marking Guide

Declaring arrays correctly - 0.5 mark
Taking keyboard inputs and store in the array- 2 marks
Array Manipulation - 4 marks
Display the output - 2 marks
Coding standards - 0.5 mark
Correct compilation of program - 0.5 mark
Correct execution of the program - 0.5 mark

```
#include <stdio.h>

int main (void)
{
	float temp[2][3] = {0};
	float avgTemp[2] = {0};
	int i , j ;

	for (i = 0 ; i < 2 ; i++)
	{
		printf("%d city :\n", i+1);

		for (j = 0 ; j < 3 ; j++)
		{
			printf("%d time temperature on the day : " , j+1);
			scanf("%f" , &temp[i][j]);
		}
```

```
            puts(" ");
        }

        for (i = 0 ; i < 2 ; i++)
        {
            for (j = 0 ; j < 3 ; j++)
            {
                avgTemp[i] += temp[i][j] ;
            }
            printf("%d city average temperature of whole day : %.2f\n", i+1 , avgTemp[i] / 3.0)
        ;
        }

        return 0 ;
}
```