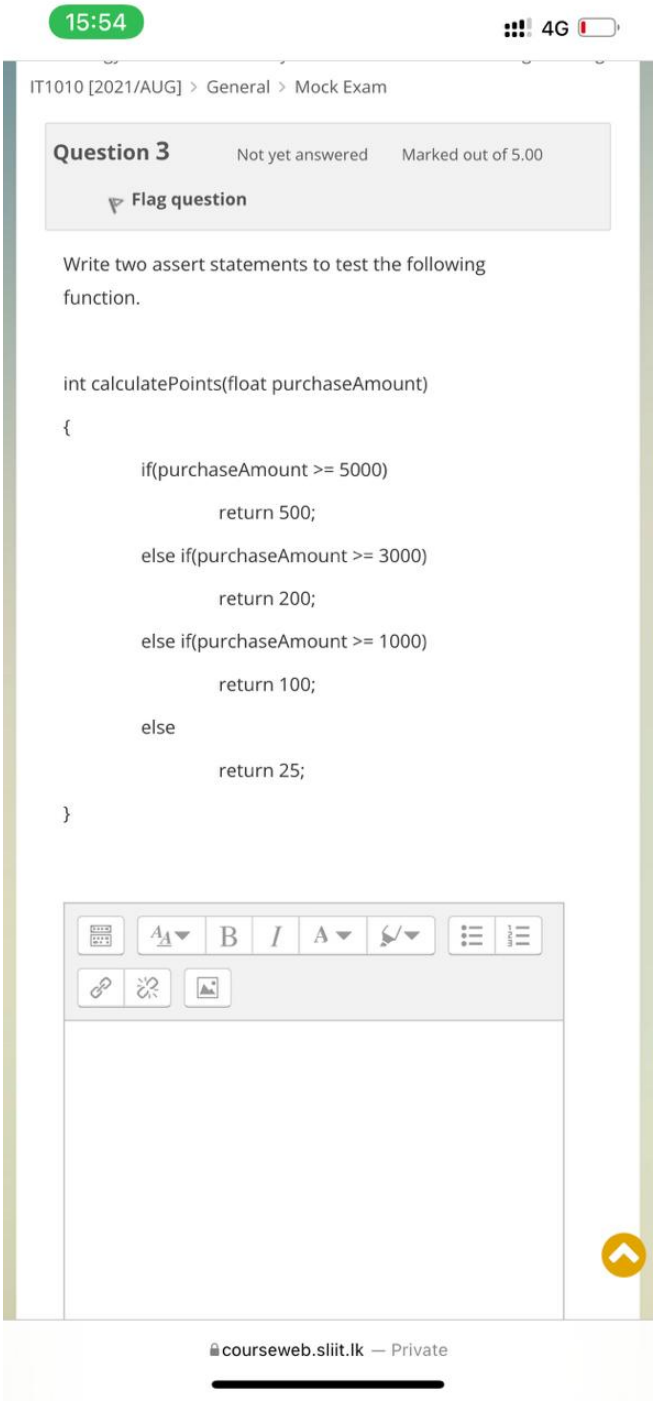
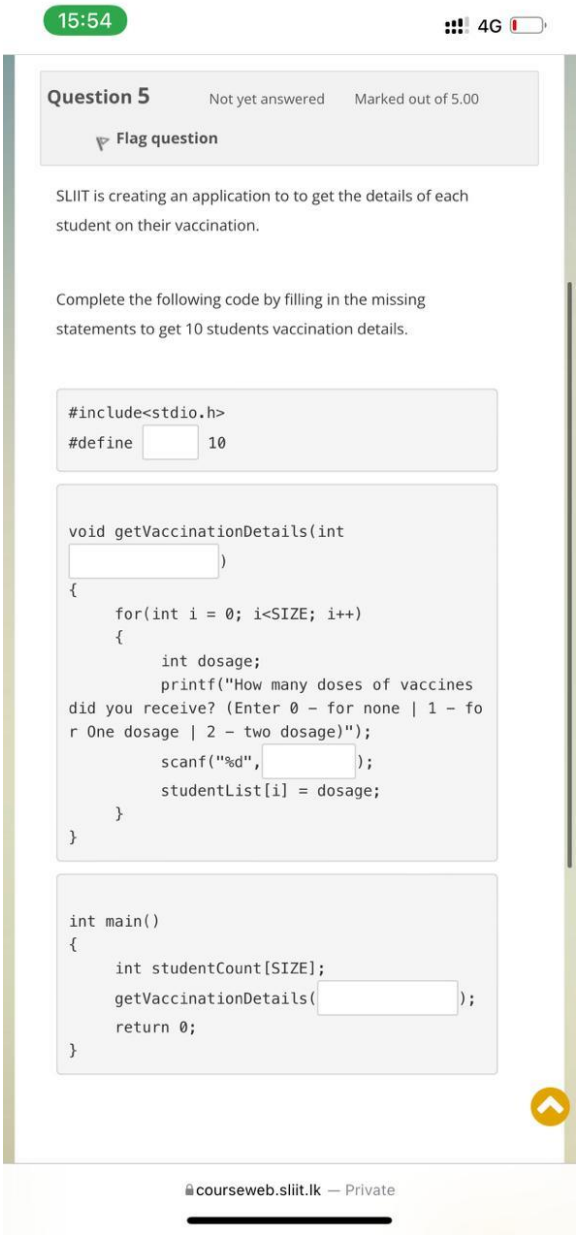
01).



Assert((calculatePoints(5500) – 500) == 0);

Assert((calculatePoints(3500) – 200) == 0);

02).



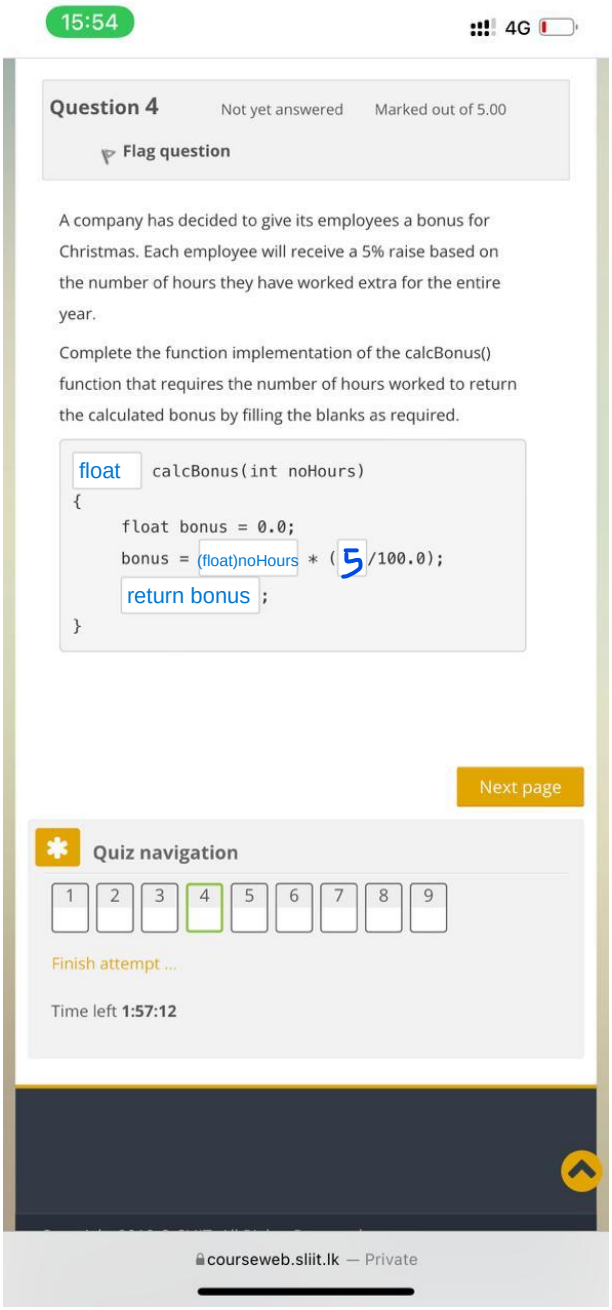
01). SIZE

02). studentList [ ]

03). &dosage

04). studentCount

03).



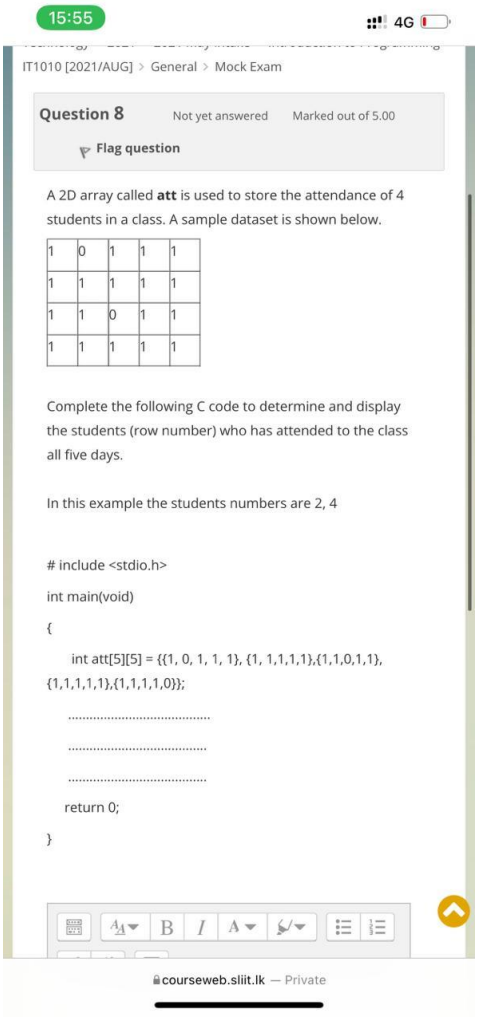
01). float

(float)

02). Bonus = noHours * 5 / 100.0;

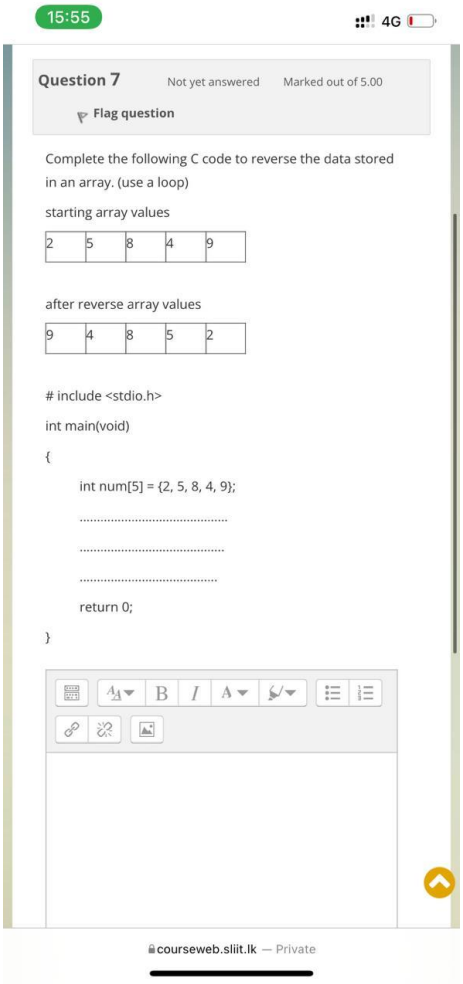
03). return bonus;

04).




```c
#include <stdio.h>

int main(void){

    int att[5][5] = {{1,0,1,1,1},{1,1,1,1,1},{1,1,0,1,1},{1,1,1,1,1}};
    int i,j;
    int count = 0;

    for(i=0; i<5; i++){
        for(j=0; j<5; j++){
            if(att[i][j] == 1){
                count++;
            }
            if(count == 5){
                printf("Student %d come all 05 days\n",i+1);
            }
        }
        count = 0;
    }

    getch();
    return 0;
}
```

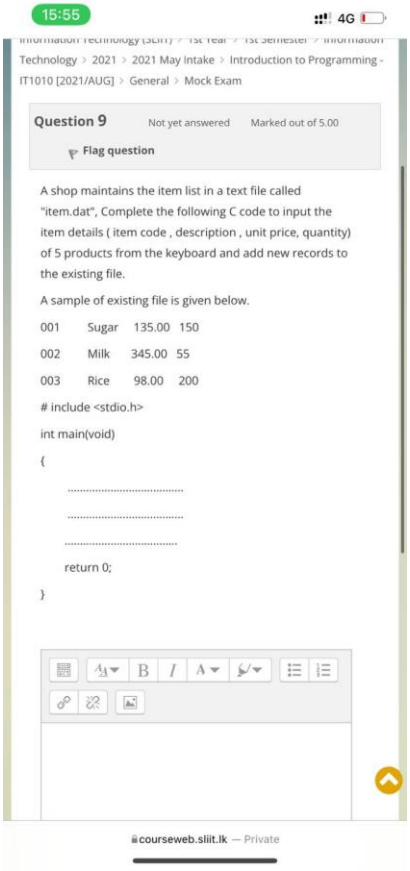
05).




```c
#include <stdio.h>

int main(void){

    int num[5] = {2,5,8,4,9};
    int revarr[5];
    int i;

    for(i=0; i<5; i++){
        revarr[i] = num[5-i-1];
    }

    for(i=0; i<5; i++){
        printf("%d\t",revarr[i]);
    }

    getch();
    return 0;
}
```

```c
for(i=4; i>=0; i--)
{
    printf("%d  ", num[i]);

}
```

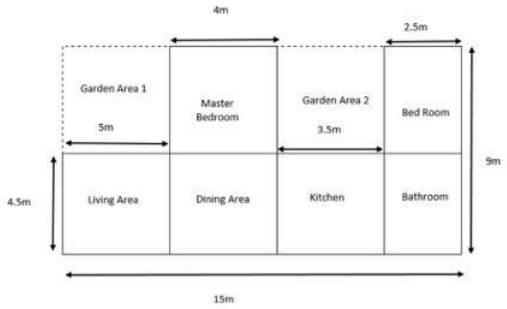
06).




```c
#include <stdio.h>

int main(void){

    FILE *fp;
    int count = 0;
    int itemcode;
    char description[20];
    float unit_price;
    int quantity;

    fp = fopen("item.dat","w");

    if(fp == NULL){
        printf("File not created");return -1;
    }

    while(count < 5){
        printf("Enter item code: ");
        scanf("%d",&itemcode);

        printf("Enter description: ");
        scanf("%s",&description);

        printf("Enter unit price: ");
        scanf("%f",&unit_price);

        printf("Enter quantity: ");
        scanf("%d",&quantity);

        fprintf(fp, "%d\t%s\t%.2f\t%d\n", itemcode,description,unit_price,quantity);
        count++;
        printf("\n");
    }

    fclose(fp);

    getch();
    return 0;
}
```

07).

15:54 4G



Assuming that the following C functions are implemented, write the main program to calculate the floor area of the above plan (excluding garden area).

```
//calculate the area of a rectangle
float area( float length, float width)
{
        return length * width;
}
//add two numbers
float add ( float a, float b)
{
    return a + b;
}
//subtract two numbers
float sub (float a, float b)
{
    return a - b;
}
```

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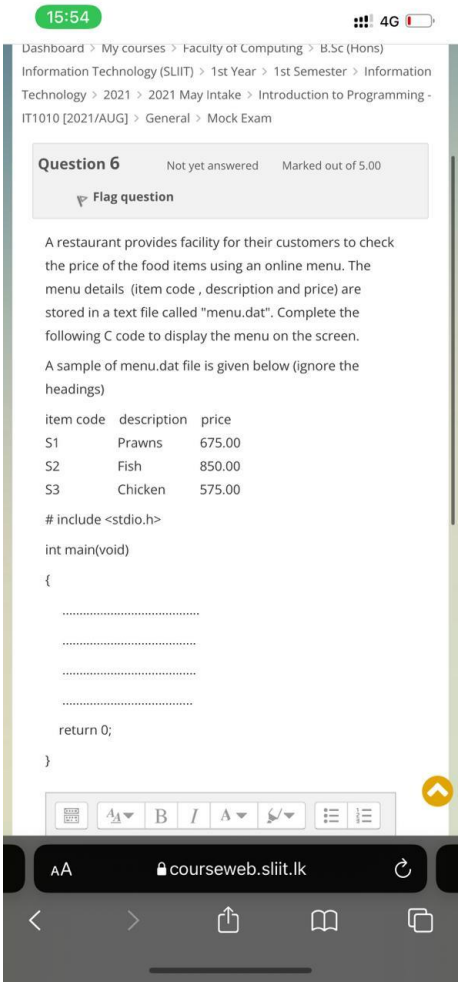
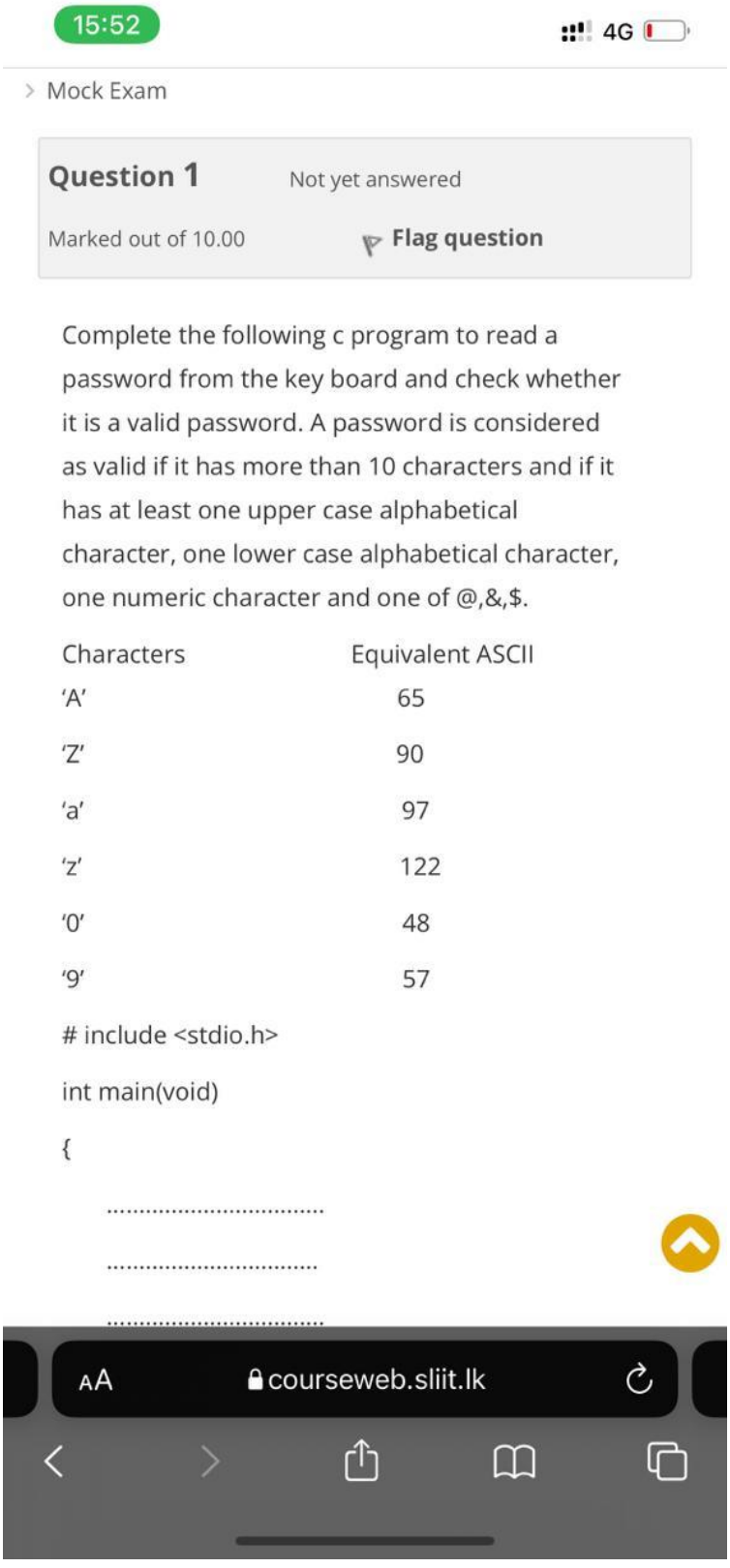
```c
#include <stdio.h>

float area(float length, float width);
float add(float a, float b);
float sub(float a, float b);
int main(void){

    float length,width;
    float garden1_length,garden2_length;
    float rarea;
    float removed_area;
    float net_area;

    printf("Enter length: ");
    scanf("%f",&length);

    printf("Enter width: ");
    scanf("%f",&width);

    printf("Enter Garden01 area length: ");
    scanf("%f",&garden1_length);

    printf("Enter Garden01 area length: ");
    scanf("%f",&garden2_length);

    rarea = area(length,width);
    removed_area = add(garden1_length,garden2_length) * 4.5;
    net_area = sub(rarea,removed_area);
    printf("Net Area: %.2f",net_area);

    getch();
    return 0;
}

// calculate the area of a triangle
float area(float length, float width){
    return length * width;
}

float add(float a, float b){
    return a + b;
}

float sub(float a, float b){
    return a - b;
}
```

08).




```c
#include <stdio.h>

int main(void){

    FILE *fp;
    char itemcode[10];
    char description[10];
    float price;

    fp = fopen("menu.dat", "r");

    if(fp == NULL){
        printf("File not exist");
        return 0;
    }

    fscanf(fp, "%s%s%f", itemcode,description,&price);
    while(!feof(fp)){
        printf("%s\t%s\t%.2f\n",itemcode,description,price);
        fscanf(fp, "%s%s%f", itemcode,description,&price);
    }

    fclose(fp);


    getch();
    return 0;
}
```

09).


15:52
4G
Mock Exam
Question 1
Not yet answered
Marked out of 10.00
Flag question
Complete the following c program to read a password from the key board and check whether it is a valid password. A password is considered as valid if it has more than 10 characters and if it has at least one upper case alphabetical character, one lower case alphabetical character, one numeric character and one of @,&,$.
Characters
Equivalent ASCII
'A'
65
'Z'
90
'a'
97
'z'
122
'0'
48
'9'
57
include <stdio.h>
int main(void)
{
.....
.....
.....
AA
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```c
#include <stdio.h>
#include <string.h>

int main(){

    int i,length,count_simple,count_capital,count_number,count_special;
    int non = 1;
    char ch;
    char pwd[100];

    count_simple = count_capital = count_number = count_special = 0;

    printf("Enter password : ");
    scanf("%s",&pwd);

    length = strlen(pwd);

    while(length < 10){
        printf("Your Password Not Follow Rules\n\n");
        printf("Enter password : ");
        scanf("%s",&pwd);

        length = strlen(pwd);
    }


    for(int i=0; i<=length; i++){
        if(97<=pwd[i] && pwd[i]<=122){
            count_simple = 1;
        }
        else if(65<=pwd[i] && pwd[i]<=90){
            count_capital = 1;
        }
        else if(48<=pwd[i] && pwd[i]<=57){
            count_number = 1;
        }
        else if(pwd[i]=='@' || pwd[i]=='&' || pwd[i]=='$'){
            count_special = 1;
        }
    }

    printf("\n");
    if(count_simple == count_capital == count_number == count_special == 1){
        printf("Password Successful");
    }
    else{
        printf("Password Unsuccessful");
    }


    getch();
    return 0;
}
```