

01).

15:54 4G

IT1010 [2021/AUG] > General > Mock Exam

Question 3 Not yet answered Marked out of 5.00

Flag question

Write two assert statements to test the following function.

```
int calculatePoints(float purchaseAmount)
{
    if(purchaseAmount >= 5000)
        return 500;
    else if(purchaseAmount >= 3000)
        return 200;
    else if(purchaseAmount >= 1000)
        return 100;
    else
        return 25;
}
```

Rich text editor toolbar: Bold, Italic, Underline, Text color, Background color, Bulleted list, Numbered list, Link, Unlink, Image.

courseweb.sliit.lk — Private

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

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

02).

15:54

4G

Question 5

Not yet answered

Marked out of 5.00

Flag question

SLIIT is creating an application to to get the details of each student on their vaccination.

Complete the following code by filling in the missing statements to get 10 students vaccination details.

```
#include<stdio.h>
#define  10

void getVaccinationDetails(int
)
{
    for(int i = 0; i<SIZE; i++)
    {
        int dosage;
        printf("How many doses of vaccines
did you receive? (Enter 0 - for none | 1 - fo
r One dosage | 2 - two dosage)");
        scanf("%d", );
        studentList[i] = dosage;
    }
}

int main()
{
    int studentCount[SIZE];
    getVaccinationDetails();
    return 0;
}
```

courseweb.sliit.lk — Private

01). SIZE

02). studentList

03). &dosage

04). studentCount

03).

15:54

4G

Question 4

Not yet answeredMarked out of 5.00

Flag question

A company has decided to give its employees a bonus for Christmas. Each employee will receive a 5% raise based on the number of hours they have worked extra for the entire year.

Complete the function implementation of the calcBonus() function that requires the number of hours worked to return the calculated bonus by filling the blanks as required.

```
float calcBonus(int noHours)
{
    float bonus = 0.0;
    bonus = (float)noHours * (5/100.0);
    return bonus;
}
```

Next page

Quiz navigation

1

2

3

4

5

6

7

8

9

[Finish attempt ...](#)

Time left 1:57:12

courseweb.sliit.lk — Private

01). float

02). Bonus = $\text{noHours} * 5 / 100.0;$

03). return bonus;

04).

15:55 4G

IT1010 [2021/AUG] > General > Mock Exam

Question 8 Not yet answered Marked out of 5.00

Flag question

A 2D array called **att** is used to store the attendance of 4 students in a class. A sample dataset is shown below.

1	0	1	1	1
1	1	1	1	1
1	1	0	1	1
1	1	1	1	1

Complete the following C code to determine and display the students (row number) who has attended to the class all five days.

In this example the students numbers are 2, 4

```
#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}, {1, 1, 1, 1, 0}};

    .....

    .....

    .....

    return 0;
}
```

#courseweb.sliit.lk — Private

```
#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).

15:55 4G

Question 7 Not yet answered Marked out of 5.00
Flag question

Complete the following C code to reverse the data stored in an array. (use a loop)

starting array values


2	5	8	4	9
---	---	---	---	---

after reverse array values

9	4	8	5	2
---	---	---	---	---

```
#include <stdio.h>

int main(void)
{
    int num[5] = {2, 5, 8, 4, 9};
    .....
    .....
    .....
    return 0;
}
```



courseweb.sliit.lk — Private

```
#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;
}
```

for(i=4; i>=0; i--)

```
{
    printf("%d ", num[i]);
}
```

06).

15:55

4G

Technology > 2021 > 2021 May Intake > Introduction to Programming - IT1010 [2021/AUG] > General > Mock Exam

Question 9

Not yet answered Marked out of 5.00

Flag question

A shop maintains the item list in a text file called "item.dat". Complete the following C code to input the item details (item code , description , unit price, quantity) of 5 products from the keyboard and add new records to the existing file.

A sample of existing file is given below.

001	Sugar	135.00	150
002	Milk	345.00	55
003	Rice	98.00	200

include <stdio.h>

```
int main(void)
{
    .....
    .....
    .....
    return 0;
}
```

A

B

I

A

#courseweb.slitit.lk — Private

```
#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", "a");

    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");
    }

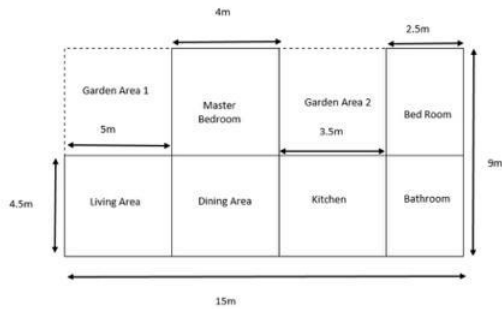
    fclose(fp);

    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;

}



```

#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 Garden02 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).

15:54

4G

Dashboard > My courses > Faculty of Computing > B.Sc (Hons)
Information Technology (SLIT) > 1st Year > 1st Semester > Information
Technology > 2021 > 2021 May Intake > Introduction to Programming -
IT1010 [2021/AUG] > General > Mock Exam

Question 6

Not yet answered

Marked out of 5.00

Flag question

A restaurant provides facility for their customers to check the price of the food items using an online menu. The menu details (item code, description and price) are stored in a text file called "menu.dat". Complete the following C code to display the menu on the screen.

A sample of menu.dat file is given below (ignore the headings)

item code	description	price
S1	Prawns	675.00
S2	Fish	850.00
S3	Chicken	575.00




```
#include <stdio.h>

int main(void)
{
    .....
    .....
    .....
    .....

    return 0;
}
```

AA

courseweb.sliit.lk

< >   

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

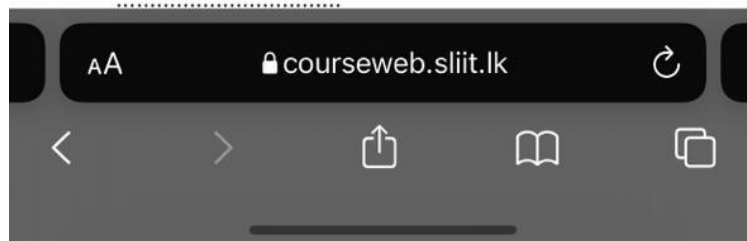
```
int main(void)
```

```
{
```

```
.....
```

```
.....
```

```
.....
```



```

#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;
}

```