Question 7 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)
{
    .....
    .....
    .....
    return 0;
}
```

QUESTION 07

```
#include<stdio.h>
#include<string.h>
int main (void){
        char password[100];
        int length,i,c1,c2,c3,c4;

printf("\n Enter the characters of the password:");
scanf("%s",& password);
length=strlen(password);

for(i=0;i<length;++i){
if(length<10){
        printf("\nCannot create a password");
        break;
}
if(password[i] >= 65 && password[i]<=90){
        ++c1;
}

if(password[i] >= 97 && password[i]<=122) {
        ++c2;
}

if(password[i] >=48 && password[i]<=57){
        ++c3;}

if(password[i] =='@'){
        ++c4;}
```

QUESTION 02

```
#include<stdio.h>
int main()
{
        char code[3];
        char descrip[10];
        float unitPrice;
        int qnt,i;
        FILE *cfptr;
        cfptr=fopen("item.txt","a");
        if(cfptr==NULL)
        {
                printf("file cannot be open\n");
        }
        for(i=0; i<5; i++)
        {
        printf(" Enter item code : ");
        scanf("%s",&code);
        printf(" Enter description : ");
        scanf("%s",descrip);
        printf(" Enter unit price : ");
        scanf("%f",&unitPrice);
        printf(" Enter Quantity : ");
        scanf("%d",&qnt);
        fprintf(cfptr,"%s\t%s\t%.2f\t%d\n",code,descrip,unitPrice,qnt);

        }
        fclose(cfptr);
        return 0;
}
```

Question 11

Not yet answered

Marked out of 5.00

Flag question

A function called **modifyArray( )** accepts a float array and number of elements in the array and increase the value of array elements by 10%.

Write a suitable function prototype for the **modifyArray( )**.

Also complete the following main function to invoke the function **modifyArray** with suitable arguments.

```
# include <stdio.h>
int main(void)
{
        float x[5] = { 2, 8, 3, 9, 10};
        ---------------------------------
        ---------------------------------
        return 0;
}
```

Function prototype - void modifyArray(float x[ ] , int size)

Function invoke -

```
{
int i;
for(i=0 ; i<size ; i++)
{
x[i] = x[i] * (10.0 / 100);

}
```

```
#include<stdio.h>
float modifyArray(float number);
int main(void)
{
 float x[5]={2,8,3,9,10};
 int i;
 for(i=0;i<5;i++)
 {
   printf("%.2f\n",modifyArray(x[i]));
 }
}
float modifyArray(float number)
{
 float answer,x;
 int i;
 for(i=0;i<5;i++)
 {
  answer=number+(number*0.10);
 }
 return answer;
}
```

≡ Quiz navigation

Finish attempt ...

Time left 1:36:49

MCQ QUESTIONS (2 MARKS EA

1 2 3 4 5 6

9 10

ESSAY QUESTIONS (5 MARKS E

11 12 13 14 15 16

19 20 21 22 23

ESSAY QUESTIONS(7.5 MARKS E

24 25

FEEDBACK

26

An online vegetable shop wants to show their prices to the customers. The details of the items are stored in "item.dat" file. Complete the following C code to display the item details.

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

item code	description	price(100g)
111	carrot	30.00
112	leeks	28.00
113	beans	32.00

```
# include <stdio.h>
int main(void)
{
    .....
    .....
    .....
    .....
   return 0;
}
```

```
#include<stdio.h>
#include<string.h>
int main()
{

 int itemC,i;
 char des[20];
 float price;

FILE*ptr1;
ptr1=fopen("item.txt","w");
 if(ptr1==NULL)
   {
     printf("not opened");
     return -1;
   }

fprintf(ptr1,"item Code\t description\tprice\t\n",itemC,des,price);
for(i=0;i<3;i++)
{
 printf("Enter the item Code:");
 scanf("%d",&itemC);

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

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

 fprintf(ptr1,"%d\t\t%s\t\t%.2f\n",itemC,des,price);
}


fclose(ptr1);
return 0;
}
```

Question 16

Not yet answered

Marked out of 5.00

Flag question

Implement a function called calTax ( ) in C to calculate the tax to be deducted from an employee by passing the salary as the parameter.

double calTax(double salary);

The tax is calculated as follows:

For salary below Rs.25000/-, no tax applies.

For salary of Rs.25000/- and above, 2% tax applies.

For salary above Rs.50000/-, 2% tax for the first Rs.25000/- and 0.5% tax for remaining amount applies

E.g.: If the salary is Rs.60000 /-, the tax is calculated as shown below:

tax = (2% tax for first 25000 rupees) + (0.5% tax for each remaining 35000 rupees)

```
#include<stdio.h>
double calTax(double salary);
int main()
{
 double sal,taxN;

 printf("Enter the salary:");
 scanf("%lf",&sal);

 taxN=calTax(sal);
 printf("Tax:%.2f",taxN);
}
double calTax(double salary)
{
 float tax;

 if(salary<25000)
 {
  tax=0.00;
 }
 else if(salary>=25000 && salary<=50000)
 {
  tax=salary*0.02;
 }
 else if(salary>50000)
 {
```

Write a C program to input a word from the keyboard, store it in a character array called **newArr** and display the number of uppercase letters stored in the array.

Hint : ASCII value of a is 97 and z is 122.

ASCII value of A is 65 and Z is 90.

Ex.

M	a	R	k	e	t

input word : MaRket

No. of uppercase letters : 2

```
#include<stdio.h>
#include<string.h>
int main(void)
{
char newArr[100];
int size , count=0 ,i;

printf("Enter Word : ");
scanf("%s" , newArr);

size = strlen(newArr);
for(i = 0 ; i < size ; i++)
```

```
#include <stdio.h>

int main()
{
   int array[6]={0};
   int i,count=0;
   for(i=0;i<6;i++)
   {
    printf("Enter a character: ");
    scanf("%d",&array[i]);
}


   for(i=0;i<6;i++)
{
    printf("%c\t",array[i]);
   }
printf("\n");

for(i=0;i<6;i++)
{
 if(array[i]>=65 && array[i]<=90)
 {
  count=count +1;
 }
}
printf("No.of upercase letter:%d",count);
  return 0;
}
```

Question 21

Not yet answered

Marked out of 5.00

Flag question

A 2D array called **sales** is used to store the sales of 5 products for 3 sales people with in a given week. Each sales person is given a target of 20000 per week. Complete the followin... who achieved the target.

e.g:

2000.00	10000.00	4000.00	6200.00	12000.00
5000.00	2000.00	1200.00	3000.00	1500.00
2400.00	7000.00	4800.00	1100.00	1100.00

output : 1

```
# include <stdio.h>
int main(void)
{
    float sales[3][5] = {{2000.00, 10000.00, 4000.00, 620...0, 1200...00},
                        {5000.00, 2000.00, 1200.00, 3000.00, 1...0.00},
                        {2400.00, 7000.00, 4800.00, 1100.00, 1...0.00}};
    .....
    .....
    .....
    return 0;
}
```

```
#include<stdio.h>
int main()
{
    int i,j,person;
    float sum;
    float sales[3][5]={{2000.00,10000.00,4000.00,6200.00,12000.00},
{5000.00,2000.00,1200.00,3000.00,1500.00},{2400.00,7000.00,4800.00,1100.0,1100.00}};

    for(i=0;i<3;i++)
    {
        for(j=0;j<5;j++)
        {
            printf("%.2f\t",sales[i][j]);
        }
        printf("\n");
    }

    for(i=0;i<3;i++)
    {
        sum=0;
        for(j=0;j<5;j++)
        {
            sum=sum+sales[i][j];
        }
        if(sum>20000)
        {
            person=i+1;
            printf("salesperson:%d",i+1);
        }
    }
}
```

Quiz navigation

1

MCQ (2 MARKS EACH)

1 2 3 4 5 6

8 9 10

ESSAY (5 MARKS EACH)

11 12 13 14 15 16

18 19 20 21 22 23

ESSAY (10 MARKS EACH)

25

FEEDBACK

26

Finish attempt ...

Time left 0:23:57

Consider the following mathematical expression.

$$C = \sqrt{|a| + b^2}$$

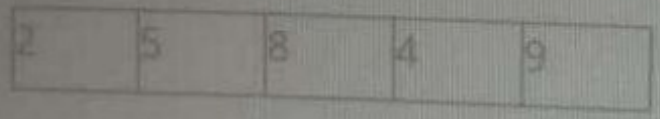
Complete the following C program to calculate the C value for given a and b value **using C Standard Math Library functions**

```
# include <stdio.h>
#include<math.h>
int main(void)
{
    int b;
    float a, C;
    a = -2.0;
    b = 4;
    .....
    return 0;
}
```

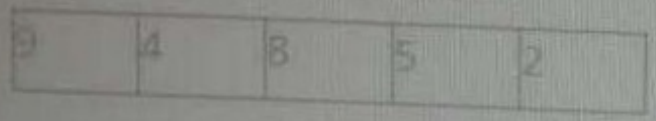
```
#include<stdio.h>
#include<math.h>
int main(void)
{
 int b;
 float a,c;
 a=-2.0;
 b=4;

 c=sqrt(fabs(a)+pow(b,2));
 printf("%f",c);
 return 0;
}
```

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

starting array values



after reverse array values

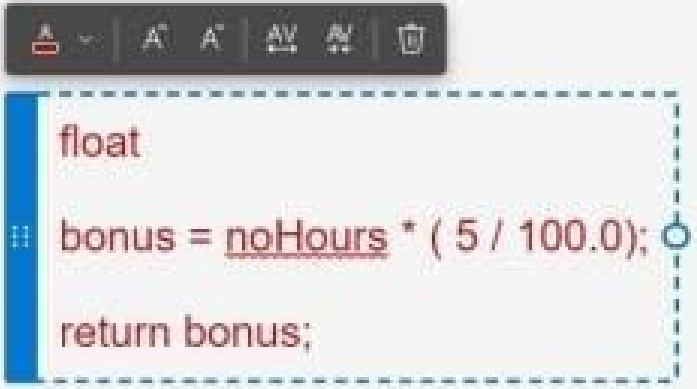



```
# include <stdio.h>
int main(void)
{
    int num[5] = {2, 5, 8, 4, 9};
    .....
    .....
    .....
    return 0;
}
```

```
#include<stdio.h>
int main(void)
{
 int mark[5];
 int i;

 for(i=0;i<5;i++)
 {
  printf("Enter the value:");
  scanf("%d",&mark[i]);
 }
 for(i=0;i<5;i++)
 {
  printf("%d\t",mark[i]);
 }
 printf("\nReverse array\n");

 for(i=4;i>=0;i--)
 {
  printf("%d\t",mark[i]);

 }
 return 0;

}
```

QUESTION 05

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



Write a C program to print the following star pattern.

```
****
*****
******
*******
******
*****
****
***
**
*
```

```
#include<stdio.h>
int main(void)
{
	int i,j;
	for(i=4;i<8;i++)
	{
		for(j=0;j<i;j++)
		{
			printf("*");
		}
		printf("\n");
	}
	for(i=1;i<7;i++)
	{
		for(j=7;j>i;j--)
		{
			printf("*");
		}
		printf("\n");
	}
}
```

Question 5

Not yet answered Marked 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.

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

Question 3 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;
}
```

Question 1 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;
}
```

QUESTION 01

```
#include<stdio.h>
int main(void)
{
        int num[5] = {2,5,8,4,9};
        int newnum[5];
        int i;
        printf(" starting array values\n");
        for(i=0; i<5; i++)
        {
                printf(" %d ", num[i]);
        }
        printf("\n\n after reverse array values\n");
        for(i=0; i<5; i++)
        {
                newnum[i] = num[4-i];
                printf(" %d ", newnum[i]);
        }
return 0;
}
```

Question 2 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;
}
```

Question 4 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;

}
```

Question 7 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)
{
    .....
    .....
    .....
    return 0;
}
```

QUESTION 03

```
#include<stdio.h>
int main()
{
   int marks[5][5]={{1,0,1,1,1},{1,1,1,1,1},{1,1,0,1,1},{1,1,1,1,1}};
   int a[5];
   int i,sum,j;
   for(i=0;i<5;++i){
   sum=0;
   for(j=0;j<5;++j){
   sum=sum+marks[i][j];
   }
   if(sum==5){
   a[i]=i+1;}
   }
   printf(" Students who wasn't absent any day:");
   printf("\n");
  for(i=0;i<5;++i){
    if(a[i]>0 && a[i]<5){
   printf("\n Students number %i",a[i]);}
    }

   return 0;
}
```

QUESTION 04

```
#include<stdio.h>
int main(void)
{
        char code[2], i;
        char name[30];
        float price;
        FILE*cfPtr;
        cfPtr = fopen("menu.dat", "a");
        if(cfPtr == NULL)
        {
                printf("File cannot open\n");
                return -1;
        }
```

QUESTION 02

```
#include<stdio.h>
int main()
{
        char code[3];
        char descrip[10];
        float unitPrice;
        int qnt,i;
        FILE *cfptr;
        cfptr=fopen("item.txt","a");
        if(cfptr==NULL)
        {
                printf("file cannot be open\n");
        }
        for(i=0; i<5; i++)
        {
        printf(" Enter item code : ");
        scanf("%s",&code);
        printf(" Enter description : ");
        scanf("%s",descrip);
        printf(" Enter unit price : ");
        scanf("%f",&unitPrice);
        printf(" Enter Quantity : ");
        scanf("%d",&qnt);
        fprintf(cfptr,"%s\t%s\t%.2f\t%d\n",code,descrip,unitPrice,qnt);

        }
        fclose(cfptr);
        return 0;
}
```

Question 16

Not yet answered

Marked out of 5.00

Flag question

Implement a function called calTax ( ) in C to calculate the tax to be deducted from an employee by passing the salary as the parameter.

double calTax(double salary);

The tax is calculated as follows:

For salary below Rs.25000/-, no tax applies.

For salary of Rs.25000/- and above, 2% tax applies.

For salary above Rs.50000/-, 2% tax for the first Rs.25000/- and 0.5% tax for remaining amount applies

E.g.: If the salary is Rs.60000 /-, the tax is calculated as shown below:

tax = (2% tax for first 25000 rupees) + (0.5% tax for each remaining 35000 rupees)

```
#include<stdio.h>
double calTax(double salary);
int main()
{
 double sal,taxN;

 printf("Enter the salary:");
 scanf("%lf",&sal);

 taxN=calTax(sal);
 printf("Tax:%.2f",taxN);
}
double calTax(double salary)
{
 float tax;

 if(salary<25000)
 {
  tax=0.00;
 }
 else if(salary>=25000 && salary<=50000)
 {
  tax=salary*0.02;
 }
 else if(salary>50000)
 {
```

Question 21

Not yet answered

Marked out of 5.00

Flag question

A 2D array called **sales** is used to store the sales of 5 products for 3 sales people with in a given week. Each sales person is given a target of 20000 per week. Complete the followin... who achieved the target.

e.g:

2000.00	10000.00	4000.00	6200.00	12000.00
5000.00	2000.00	1200.00	3000.00	1500.00
2400.00	7000.00	4800.00	1100.00	1100.00

output : 1

```
# include <stdio.h>
int main(void)
{
    float sales[3][5] = {{2000.00, 10000.00, 4000.00, 620...0, 1200...00},
                        {5000.00, 2000.00, 1200.00, 3000.00, 1...0.00},
                        {2400.00, 7000.00, 4800.00, 1100.00, 1...0.00}};
    .....
    .....
    .....
    return 0;
}
```

```
#include<stdio.h>
int main()
{
    int i,j,person;
    float sum;
    float sales[3][5]={{2000.00,10000.00,4000.00,6200.00,12000.00},
{5000.00,2000.00,1200.00,3000.00,1500.00},{2400.00,7000.00,4800.00,1100.0,1100.00}};

    for(i=0;i<3;i++)
    {
        for(j=0;j<5;j++)
        {
            printf("%.2f\t",sales[i][j]);
        }
        printf("\n");
    }

    for(i=0;i<3;i++)
    {
        sum=0;
        for(j=0;j<5;j++)
        {
            sum=sum+sales[i][j];
        }
        if(sum>20000)
        {
            person=i+1;
            printf("salesperson:%d",i+1);
        }
    }
}
```

Quiz navigation

1

MCQ (2 MARKS EACH)

1 2 3 4 5 6

8 9 10

ESSAY (5 MARKS EACH)

11 12 13 14 15 16

18 19 20 21 22 23

ESSAY (10 MARKS EACH)

25

FEEDBACK

26

Finish attempt ...

Time left 0:23:57

Write a C program to input a word from the keyboard, store it in a character array called **newArr** and display the number of uppercase letters stored in the array.

Hint : ASCII value of a is 97 and z is 122.

ASCII value of A is 65 and Z is 90.

Ex.

M	a	R	k	e	t

input word : MaRket

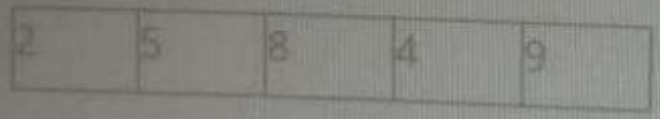
No. of uppercase letters : 2

```
#include<stdio.h>
#include<string.h>
int main(void)
{
char newArr[100];
int size , count=0 ,i;

printf("Enter Word : ");
scanf("%s" , newArr);

size = strlen(newArr);
for(i = 0 ; i < size ; i++)
```

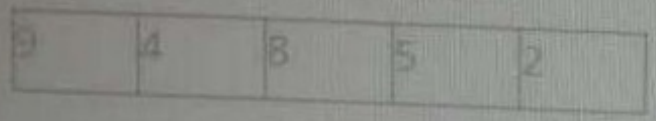
```
#include <stdio.h>

int main()
{
   int array[6]={0};
   int i,count=0;
   for(i=0;i<6;i++)
   {
    printf("Enter a character: ");
    scanf("%d",&array[i]);
}


   for(i=0;i<6;i++)
{
    printf("%c\t",array[i]);
   }
printf("\n");

for(i=0;i<6;i++)
{
 if(array[i]>=65 && array[i]<=90)
 {
  count=count +1;
 }
}
printf("No.of upercase letter:%d",count);
  return 0;
}
```

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

starting array values



after reverse array values




```
# include <stdio.h>
int main(void)
{
    int num[5] = {2, 5, 8, 4, 9};
    .....
    .....
    .....
    return 0;
}
```

```
#include<stdio.h>
int main(void)
{
 int mark[5];
 int i;

 for(i=0;i<5;i++)
 {
  printf("Enter the value:");
  scanf("%d",&mark[i]);
 }
 for(i=0;i<5;i++)
 {
  printf("%d\t",mark[i]);
 }
 printf("\nReverse array\n");

 for(i=4;i>=0;i--)
 {
  printf("%d\t",mark[i]);

 }
 return 0;

}
```

Consider the following mathematical expression.

$$C = \sqrt{|a| + b^2}$$

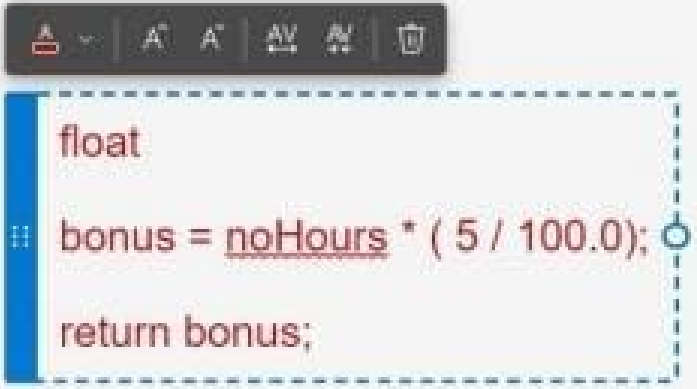
Complete the following C program to calculate the C value for given a and b value **using C Standard Math Library functions**

```
# include <stdio.h>
#include<math.h>
int main(void)
{
    int b;
    float a, C;
    a = -2.0;
    b = 4;
    .....
    return 0;
}
```

```
#include<stdio.h>
#include<math.h>
int main(void)
{
 int b;
 float a,c;
 a=-2.0;
 b=4;

 c=sqrt(fabs(a)+pow(b,2));
 printf("%f",c);
 return 0;
}
```

QUESTION 05

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



Write a C program to print the following star pattern.

```
****
*****
******
*******
******
*****
****
***
**
*
```

```
#include<stdio.h>
int main(void)
{
	int i,j;
	for(i=4;i<8;i++)
	{
		for(j=0;j<i;j++)
		{
			printf("*");
		}
		printf("\n");
	}
	for(i=1;i<7;i++)
	{
		for(j=7;j>i;j--)
		{
			printf("*");
		}
		printf("\n");
	}
}
```

Question 3 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;
}
```

QUESTION 01

```
#include<stdio.h>
int main(void)
{
        int num[5] = {2,5,8,4,9};
        int newnum[5];
        int i;
        printf(" starting array values\n");
        for(i=0; i<5; i++)
        {
                printf(" %d ", num[i]);
        }
        printf("\n\n after reverse array values\n");
        for(i=0; i<5; i++)
        {
                newnum[i] = num[4-i];
                printf(" %d ", newnum[i]);
        }
return 0;
}
```

Question 5

Not yet answered Marked 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.

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

Question 1 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;
}
```

Question 4 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;

}
```

QUESTION 03

```
#include<stdio.h>
int main()
{
   int marks[5][5]={{1,0,1,1,1},{1,1,1,1,1},{1,1,0,1,1},{1,1,1,1,1}};
   int a[5];
   int i,sum,j;
   for(i=0;i<5;++i){
   sum=0;
   for(j=0;j<5;++j){
   sum=sum+marks[i][j];
   }
   if(sum==5){
   a[i]=i+1;}
   }
   printf(" Students who wasn't absent any day:");
   printf("\n");
  for(i=0;i<5;++i){
    if(a[i]>0 && a[i]<5){
   printf("\n Students number %i",a[i]);}
    }

   return 0;
}
```

QUESTION 04

```
#include<stdio.h>
int main(void)
{
        char code[2], i;
        char name[30];
        float price;
        FILE*cfPtr;
        cfPtr = fopen("menu.dat", "a");
        if(cfPtr == NULL)
        {
                printf("File cannot open\n");
                return -1;
        }
```

Question 7 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)
{
    .....
    .....
    .....
    return 0;
}
```

Question 2 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;
}
```

QUESTION 02

```
#include<stdio.h>
int main()
{
        char code[3];
        char descrip[10];
        float unitPrice;
        int qnt,i;
        FILE *cfptr;
        cfptr=fopen("item.txt","a");
        if(cfptr==NULL)
        {
                printf("file cannot be open\n");
        }
        for(i=0; i<5; i++)
        {
        printf(" Enter item code : ");
        scanf("%s",&code);
        printf(" Enter description : ");
        scanf("%s",descrip);
        printf(" Enter unit price : ");
        scanf("%f",&unitPrice);
        printf(" Enter Quantity : ");
        scanf("%d",&qnt);
        fprintf(cfptr,"%s\t%s\t%.2f\t%d\n",code,descrip,unitPrice,qnt);

        }
        fclose(cfptr);
        return 0;
}
```

Question 11

Not yet answered

Marked out of 5.00

Flag question

A function called **modifyArray( )** accepts a float array and number of elements in the array and increase the value of array elements by 10%.

Write a suitable function prototype for the **modifyArray( )**.

Also complete the following main function to invoke the function **modifyArray** with suitable arguments.

```
# include <stdio.h>
int main(void)
{
        float x[5] = { 2, 8, 3, 9, 10};
        ---------------------------------
        ---------------------------------
        return 0;
}
```

Function prototype - void modifyArray(float x[ ] , int size)

Function invoke -

```
{
int i;
for(i=0 ; i<size ; i++)
{
x[i] = x[i] * (10.0 / 100);

}
```

```
#include<stdio.h>
float modifyArray(float number);
int main(void)
{
 float x[5]={2,8,3,9,10};
 int i;
 for(i=0;i<5;i++)
 {
   printf("%.2f\n",modifyArray(x[i]));
 }
}
float modifyArray(float number)
{
 float answer,x;
 int i;
 for(i=0;i<5;i++)
 {
  answer=number+(number*0.10);
 }
 return answer;
}
```

≡ Quiz navigation

Finish attempt ...

Time left 1:36:49

MCQ QUESTIONS (2 MARKS EA

1 2 3 4 5 6

9 10

ESSAY QUESTIONS (5 MARKS E

11 12 13 14 15 16

19 20 21 22 23

ESSAY QUESTIONS(7.5 MARKS E

24 25

FEEDBACK

26

QUESTION 07

```
#include<stdio.h>
#include<string.h>
int main (void){
        char password[100];
        int length,i,c1,c2,c3,c4;

printf("\n Enter the characters of the password:");
scanf("%s",& password);
length=strlen(password);

for(i=0;i<length;++i){
if(length<10){
        printf("\nCannot create a password");
        break;
}
if(password[i] >= 65 && password[i]<=90){
        ++c1;
}

if(password[i] >= 97 && password[i]<=122) {
        ++c2;
}

if(password[i] >=48 && password[i]<=57){
        ++c3;}

if(password[i] =='@'){
        ++c4;}
```

Question 05

A cab service has three types of vehicles for rental service (C- Car, V- Van, B- Bus). Rs.40.00 will be charged per kilometer from a car, Rs.50.00 from a van and Rs. 75.00 from a bus. 5.0% discount is given if the total distance is above 100 km. Discount will be given only to cars and vans. Buses will not get the discount.

Following C program is written to enter the type of the vehicle and the total distance from the keyboard. Complete the program to calculate and display the discount received.

```
#include<stdio.h>
int main(void)
{
        char type;
        int distance;
        float discount = 0;

        printf("Enter vehicle type:");
        scanf("%c", &type);

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

        .....
        .....
        .....

        return 0;
}
```

An online vegetable shop wants to show their prices to the customers. The details of the items are stored in "item.dat" file. Complete the following C code to display the item details.

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

item code	description	price(100g)
111	carrot	30.00
112	leeks	28.00
113	beans	32.00

```
# include <stdio.h>
int main(void)
{
    .....
    .....
    .....
    .....
   return 0;
}
```

```
#include<stdio.h>
#include<string.h>
int main()
{

 int itemC,i;
 char des[20];
 float price;

FILE*ptr1;
ptr1=fopen("item.txt","w");
 if(ptr1==NULL)
   {
     printf("not opened");
     return -1;
   }

fprintf(ptr1,"item Code\t description\tprice\t\n",itemC,des,price);
for(i=0;i<3;i++)
{
 printf("Enter the item Code:");
 scanf("%d",&itemC);

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

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

 fprintf(ptr1,"%d\t\t%s\t\t%.2f\n",itemC,des,price);
}


fclose(ptr1);
return 0;
}
```

(globals)

revision.c

```c
#include<stdio.h>

int main(void)
{

   char ch;
   float flt;
   int no;
   double dbl;

   scanf("%d",&no); //4
   scanf("%f",&flt);  //5.5
   scanf("%f",&dbl); //5.6
   scanf("%c",&ch);  //g
   printf("Float value is %f \n", flt);
   printf("Character is %c \n", ch);
   printf("Integer value is %d\n" , no);
   printf("Double value is %lf \n", dbl);
    return 0;
}
```

C:\Users\theni\Documents\revision.exe

```
4
5.5
5.6
Float value is 5.500000
Character is

Integer value is 4
Double value is 0.000000

--------------------------------
Process exited after 10.52 seconds with return value 0
Press any key to continue . . .
```

Question 11

getDiscountRate() function returns the discount rate for an item when the item no is given as a parameter.

displayDetails() function displays the item No, price and the amount to be paid when they are passed to the function.

When item no and the price of an item are entered from the keyboard in the main function, complete the following C program to calculate and display the amount to be paid using the given functions.

Hint: amount to be paid = price * (1 - discount rate/100)

```
#include<stdio.h>
float getDiscountRate(int itemNo);
void displayDetails(int itemNo, float price, float amountToBePaid);
int main(void)
{
        int itemNo;
        float price;
        printf("Enter item No :");  //input values from keyboard
        scanf("%d",&itmNo);
        printf("Enter price :");
        scanf("%f",&price);

        //calculate amount to be paid after discount and
display
.....
        .....
        .....
        return 0;

}
```

Write a C program to input a word from the keyboard, store it in a character array called **newArr** and display the number of uppercase letters stored in the array.

Hint : ASCII value of a is 97 and z is 122.

ASCII value of A is 65 and Z is 90.

Ex.

M	a	R	k	e	t

Input word : MaRket

No. of uppercase letters : 2

Question 07

Write a C program to do the following.

1. Define a structure called **center** witch can be used to store x and y coordinates of center of a circle.
2. Declare 2 center points **C1** and **C2**.
3. Initialize **C1** and **C2** with suitable values.
4. Calculate and display the distance between the centers.

e.g if two center points are C1 (x1, y1) and C2 (x2, y2)

$$distance = \sqrt{(x1 - x2)^2 + (y1 - y2)^2}$$

Question 08

Write a C program to read covid-19 patient details(Division ID, Number of patients) of 5 divisions from the keyboard and store them in a text file called "patients.dat".

Division ID	No of patients
----------	----------
----------	----------

Question 09

To test the given function, write **two suitable assert statements.**

This function will return displacement(s) of an object when its initial velocity (u), acceleration (a), and time (t) traveled are passed as parameters.

```
double calculate(double u, double a, double t)
{
        double s = u * t + (a * t * t) / 2;
        return s;
}
```

Sample data

Displacement (s) / m	Initial velocity (u) / ms^{-1}	Acceleration (a) / ms^{-2}	Time (t) / s
750.0	25.0	10.0	10.0
2000.0	50.0	5.0	20.0
812.5	100.0	25.0	5.0
1365.0	125.0	20.0	7.0

```
float getDiscountRate(int itemNo)
{
        float discountRate;
        if (itemNo == 50)
                discountRate = 5.0;
        else if (itemNo == 23)
                discountRate = 7.5;
        else if (itemNo == 12)
                discountRate = 10.0;
        else
                discountRate  = 0;

        return discountRate;

}
void displayDetails(int itemNo, float price, float amountToBePaid)
{
        printf("Discount Details\n");
        printf("Item No\tPrice\tAmount\n");
        printf("%d\t%.2f\t%.2f\n", itemNo, price, amountToBePaid);
}
```

Question 10

You are suppose to write a C program to store 10 numbers in an array called numbers, and find whether all the stored numbers are multiples of a number (n) input by the user.

e.g. if array has numbers 2, 6, 8, 10, 4, 2, 6, 14, 20, 16 and n = 2 , output "divisible by 2"

if array has numbers 2, 6, 8, 10, 4, 7, 6, 14, 20, 16 and n = 2 , output " not divisible by 2"

Complete the following program to accomplish the above task.

```
# include <stdio.h>
int main(void)
{
        int numbers[10] = {2, 6, 8, 10, 4, 2, 6, 14, 20, 16};
        int n;
        printf("Input the value of n");
        scanf("%d", &n);
        .....
        .....
        .....
        return 0;
}
```