

Assignment 2

- 1) Find the price of item when discount is given (specify different discount based on price)

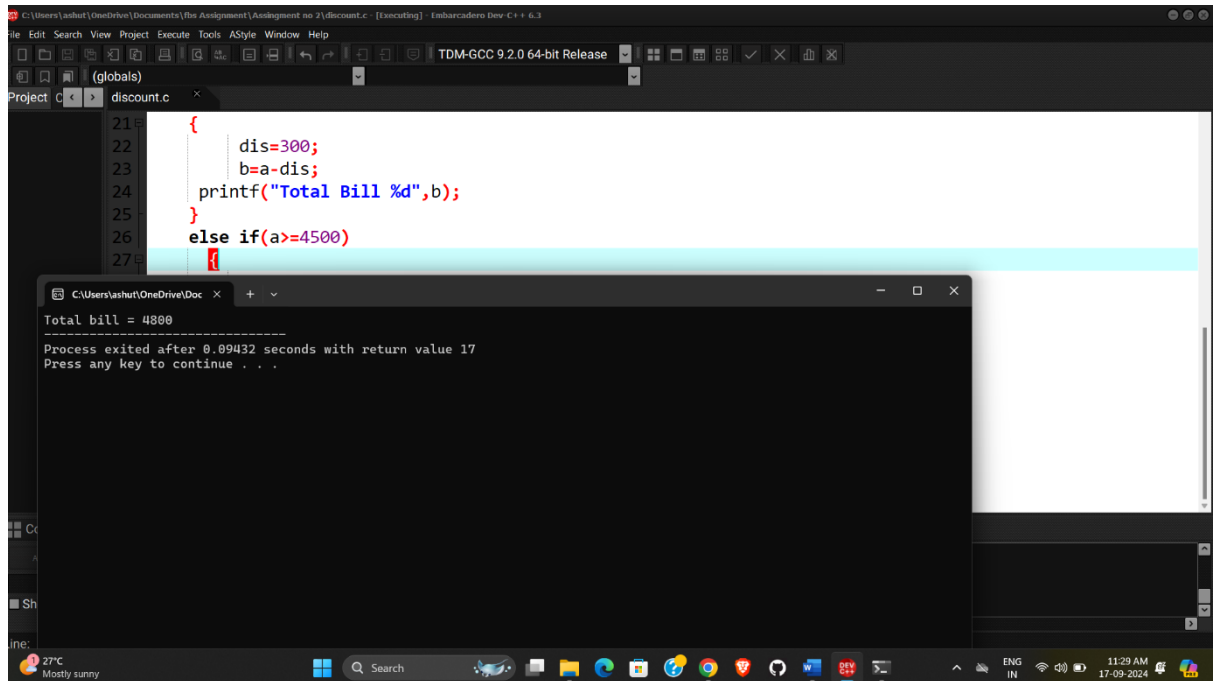
```
#include<stdio.h>
void main()
{
    int dis;
    int b;
    int a=5000;
    if(a>=10000)
    {
        dis=1000;
        b=a-dis;
        printf("Total Bill %d",b);
    }
    else if (a>=7000)
    {
        dis=500;
        b=a-dis;
        printf("Total Bill %d",b);
    }
    else if(a>=6500)
    {
        dis=300;
        b=a-dis;
        printf("Total Bill %d",b);
    }
    else if(a>=4500)
    {
        dis=200;
        b=a-dis;
        printf("Total bill = %d",b);
    }
    else
    {
```

```

printf("we do not give you discount");
}

}

```



2)Write a program to find greatest of three numbers using nested if-else.

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

```
void main ()
```

```
{
```

```
    int a,b,c;
```

```
    a=24;b=55,c=84;
```

```
    if(a>b&& a>c){
```

```
        printf("a ia greater than others");
```

```
    }
```

```
    else if (b>c) {
```

```
        printf("b is greter than others");
```

```

    }

else

    printf("c ia greter than others");

}

```

The screenshot shows a code editor window titled 'greter.c' with the following code:

```

1 #include<stdio.h>
2 void main ()
3 {
4     int a,b,c;
5     a=24;b=55,c=84;
6     if(a>b&&a>c){
7         printf("a ia greater than others");
8     }
9     else if (b>c) {
10        printf("b is greter than others");
11    }
12    else
13        printf("c ia greter than others");
14 }

```

Below the code editor, a terminal window shows the output of the program:

```

c ia greter than others
Process exited after 0.09131 seconds with return value 23
Press any key to continue . . .

```

3) Accept two numbers from user and an operator (+,-,/,*,%) based on that perform the desired operations.

```

#include<stdio.h>

void main()

{

    int num1,num2;

    char opreter;

    printf("Enter Frist no = ");

    scanf( "%d",&num1);

    printf("Enter a second no = ");

    scanf( "%d",&num2);

```

```
printf("Enter the opreter (+,-,*,/,%) = ");
scanf(" %c",&opreter);
```

```
if(opreter=='+')
{
    printf("result = %d",num1+num2);
}
else if(opreter=='-')
{
    printf("result = %d" , num1-num2);
}
else if(opreter=='*')
{
    printf("result = %d" , num1*num2);
}
else if(opreter=='/')
{
    if(num2!=0){
        printf("result = %d" , num1/num2);
    }
    else{
        printf("you put wrong no");
    }
}
else if(opreter=='%')
```

```

{
    if(num2!=0){
        printf("result = %d" , num1%num2);
    }
    else{
        printf("you put wrong no");
    }
}

else
{printf("invalid data");

}

}

```

The screenshot shows a C++ IDE with a project named 'newcalculator.c'. The code in the editor is as follows:

```

1 #include<stdio.h>
2 void main()
3 {
4     int num1,num2;
5     char opreter;
6     printf("Enter Frist no = ");
7     scanf( "%d",&num1);

```

The output window shows the program's execution:

```

Enter Frist no = 2
Enter a second no = 5
Enter the opreter (+,-,*,/,) = *
result = 10
-----
Process exited after 17.94 seconds with return value 11
Press any key to continue . . . |

```

The IDE interface includes a menu bar (File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, Help), a toolbar, and a status bar at the bottom showing the system time as 11:36 AM on 17-09-2024.

4) Display a menu to the user (like 1. Even Odd 2. Basic salary etc), ask the user to enter his choice, then based on that perform the desired operations.

```
#include<stdio.h>
void main(){
    int con,no;
    int sal,da,ta,hra;
    printf("Enter choise \n cheek no press 1 \n cheek salary press 2 \n which
is your task = ");
    scanf("%d",& con);
    //printf(" you are enter = %d" , con);

    if(con==1)

    {

        printf("enter a no = ");
        scanf("%d",& no);
        {

            if(no%2==0)
            {
                printf("your digit is even");
            }
            else if (no%2!=0)
            {
                printf(" your digit is odd");
            }
        }

    }
}

if(con==2)
{
    printf("enter a basic salary = ");
    scanf("%d",& sal);
    if(sal>=25000)
    {
```

```
        da=sal*10/100;
        ta=sal*20/100;
        hra=sal*25/100;
        printf("yor da is = %d\n your ta is = %d\n your hra is =
%d",da,ta,hra);
        int totalsa=sal+da+ta+hra;
        printf("\nyour total salary is =%d",totalsa);
    }
    else if(sal>=15000 && sal< 25000)
    {
        da=sal*15/100;
        ta=sal*25/100;
        hra=sal*30/100;
        printf("yor da is = %d\n your ta is = %d\n your hra is =
%d",da,ta,hra);
        int totalsa=sal+da+ta+hra;
        printf("\nyour total salary is =%d",totalsa);
    }
    else{
        printf("you are not get da,ta,hra");
    }
}

}
```

The screenshot shows a C++ IDE with a file named `menu.c`. The code defines a `main` function that prompts the user to enter a choice (1 for cheek, 2 for salary) and then a task number. It calculates and displays the salary components: basic salary (54000), Dearness Allowance (5400), House Rent Allowance (10800), and Total Salary (83700). The output window shows the program's execution, including the prompts and the calculated values.

```
1 #include<stdio.h>
2 void main(){
3     int con,no;
4     int sal,da,ta,hra;
5     printf("Enter choise \n cheek no press 1 \n cheek salary press 2 \n which is your task = ");
6     scanf("%d",& con);
7     //printf(" you are enter = %d" , con);
8
9     if(con==1)
10
```

Output:

```
Enter choise
cheek no press 1
cheek salary press 2
which is your task = 2
enter a basic salary = 54000
yor da is = 5400
your ta is = 10800
your hra is = 13500
your total salary is =83700
-----
Process exited after 9.146 seconds with return value 28
Press any key to continue . . .
```

5) Accept the price from user. Ask the user if he is a student (user may say yes or no). If he is a student and he has purchased more than 500 then discount is 20% otherwise discount is 10%. But if he is not a student then if he has purchased more than 600 discount is 15% otherwise there is not discount.

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

```
void main() {
```

```
    int num;
```

```
    int respons;
```

```
    printf("Enter the rate = ");
```

```
    scanf("%d",& num);
```

```
    printf(" are you a student then press (1) \n are you not a student then press (2)\n Enter your role = ");
```

```
    scanf("%d",& respons);
```

```
    if(respons==1)
```

```
{
```



```
        if (num>=500)
        {
            printf("you have 20 %% discount");

        }
    else
    {
        printf("you have 10 %% discount");

    }
}
```

```
else if(respons==2)
{
```

```
    if (num>=600)
    {
        printf("you have 15 %% discount");

    }
    else {
        printf("you have no discount");
    }
}
else
{
```

```
printf("invalid syntax");
```

```
}
```

```
}
```

```
1 #include <stdio.h>
2 void main() {
3     int num;
4     int respons;
5     printf("Enter the rate = ");
6     scanf("%d",& num);
7     printf(" are you a student then press (1) \n are you not a student then press (2)\n Enter your role");
8     scanf("%d",& respons);
9
10    if(respons==1)
11    {
```

```
Enter the rate = 800
are you a student then press (1)
are you not a student then press (2)
Enter your role = 1
you have 20 % discount
-----
Process exited after 8.392 seconds with return value 22
Press any key to continue . . .
```