

Assignment 1

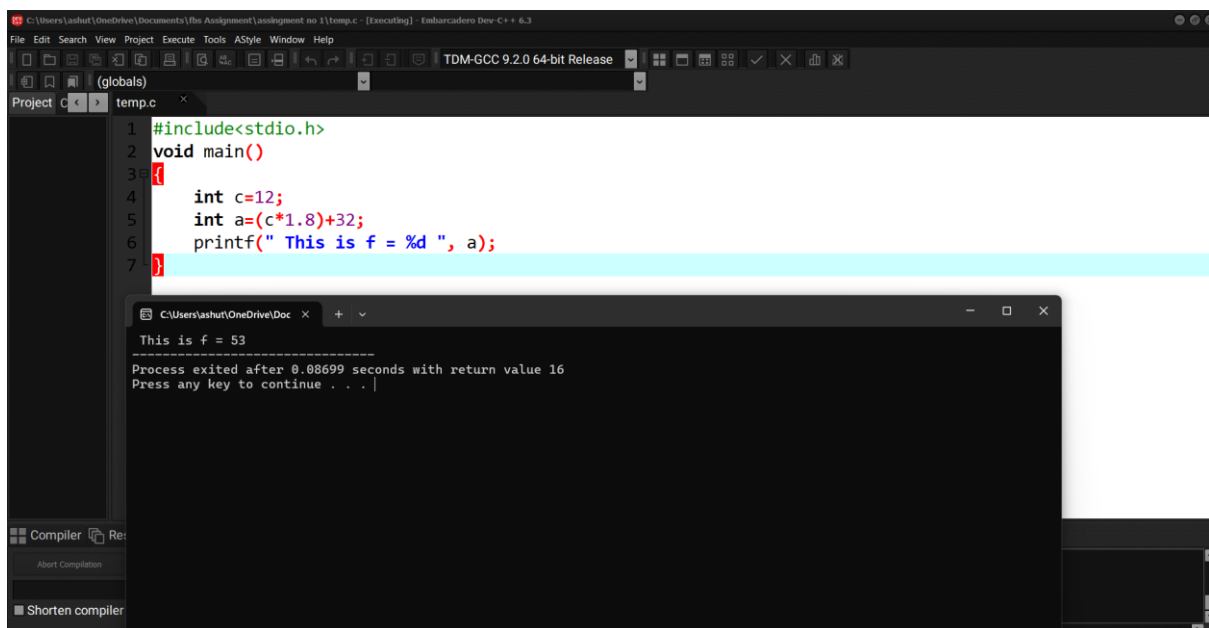
1) Finding F from C (temp).

```
#include<stdio.h>

void main()
{
    int c=12;

    int a=(c*1.8)+32;

    printf(" This is f = %d ", a);
}
```



The screenshot shows a C++ IDE with the following code in a file named `temp.c`:

```
1 #include<stdio.h>
2 void main()
3 {
4     int c=12;
5     int a=(c*1.8)+32;
6     printf(" This is f = %d ", a);
7 }
```

The output window shows the execution result:

```
This is f = 53
-----
Process exited after 0.08699 seconds with return value 16
Press any key to continue . . .
```

2 Finding area and perimeter of rectangle or circle.

```
#include<stdio.h>

void main()
{
    // this is for rectangular
```

```
int length=12;

int width=21;

int area=length*width;

int perimeter=2*(length+width);

printf("\n this is a area and perimeter of rectangle %d & %d ",area,perimeter);
```

```
//this is for circle
```

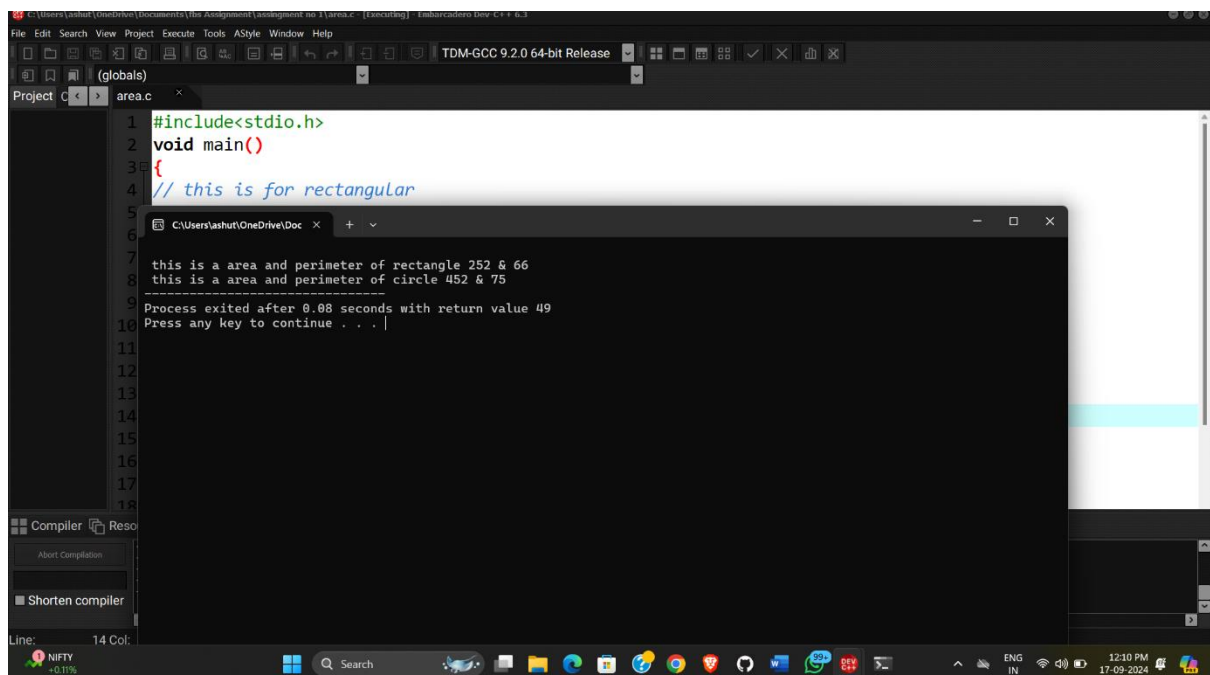
```
int r=12;

int rea=3.14*(r*r);
```

```
int pe=2*3.14*r;
```

```
printf("\n this is a area and perimeter of circle %d & %d",rea,pe);
```

```
}
```



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

```
1 #include<stdio.h>
2 void main()
3 {
4     // this is for rectangular
5
6
7
8
9
10
11
12
13
14
15
16
17
18
```

A terminal window is open, displaying the output of the program:

```
this is a area and perimeter of rectangle 252 & 66
this is a area and perimeter of circle 452 & 75
-----
Process exited after 0.08 seconds with return value 49
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 'Line: 14 Col: 14'.

3 Accept a 3 digit number from user and find the sum of the digits and also reverse the number

```
#include <stdio.h>

void main()
{
    int num=123;

    int a=num%10;

    num=num/10;

    int b=num%10;

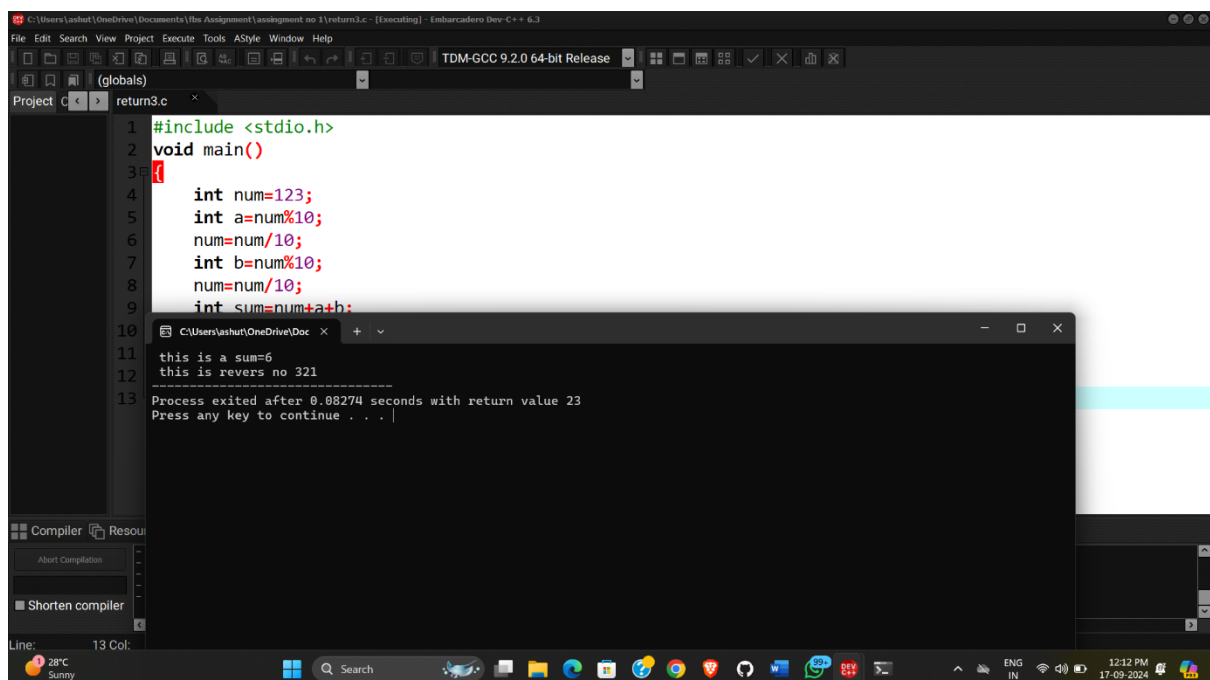
    num=num/10;

    int sum=num+a+b;

    printf(" this is a sum=%d",sum);

    int a1=(a*100)+(b*10)+num;

    printf("\n this is revers no %d",a1);
}
```



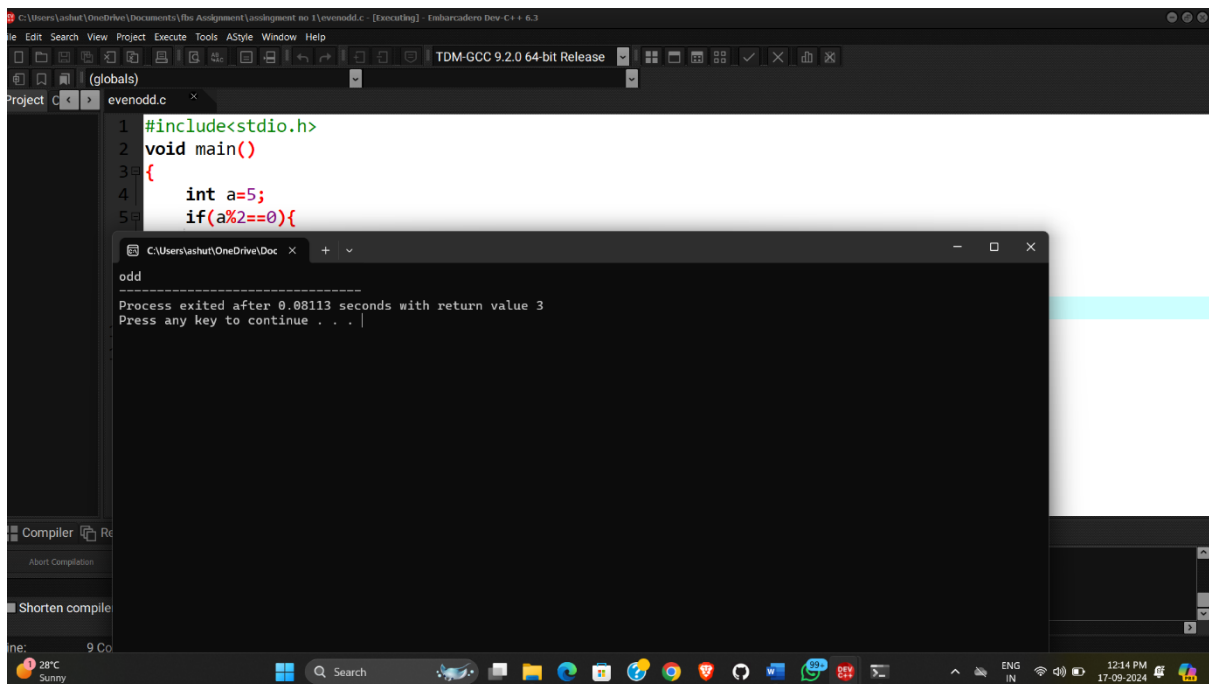
```
1 #include <stdio.h>
2 void main()
3 {
4     int num=123;
5     int a=num%10;
6     num=num/10;
7     int b=num%10;
8     num=num/10;
9     int sum=num+a+b;
10
11     printf(" this is a sum=%d",sum);
12     printf("\n this is revers no %d",a1);
13 }
```

Process exited after 0.08274 seconds with return value 23
Press any key to continue . . .

4 Check if the given number is even or odd.

```
#include<stdio.h>

void main()
{
    int a=5;
    if(a%2==0){
        printf("even");
    }
    else{
        printf("odd");
    }
}
```



The screenshot shows a C++ IDE window titled "C:\Users\ashut\OneDrive\Documents\Ihs Assignment\assignment no 1\evenodd.c - [Executing] - Embarcadero Dev-C++ 6.3". The code in the editor is:

```
1 #include<stdio.h>
2 void main()
3 {
4     int a=5;
5     if(a%2==0){
```

A terminal window is open in the foreground, displaying the output of the program:

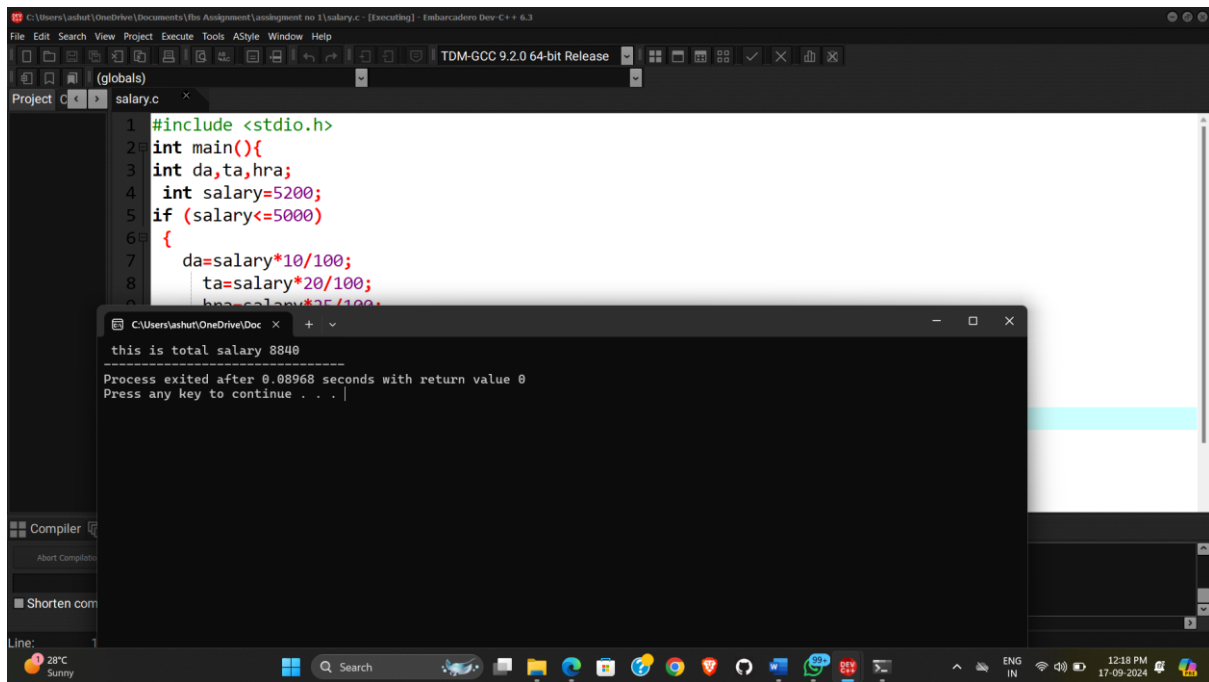
```
odd
-----
Process exited after 0.08113 seconds with return value 3
Press any key to continue . . .
```

The IDE interface includes a menu bar (File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, Help), a toolbar, and a project explorer on the left showing the file "evenodd.c". The status bar at the bottom indicates the temperature is 28°C and the date is 17-09-2024.

5 Calculating total salary based on basic. If basic ≤ 5000 da, ta and hra will be 10%, 20% and 25% respectively otherwise da, ta and hra will be 15%, 25% and 30% respectively.

```
#include <stdio.h>

int main(){
    int da,ta,hra;
    int salary=5200;
    if (salary<=5000)
    {
        da=salary*10/100;
        ta=salary*20/100;
        hra=salary*25/100;
    }
    else
    {
        da=salary*15/100;
        ta=salary*25/100;
        hra=salary*30/100;
    }
    int totals=salary+da+ta+hra;
    printf(" this is total salary %d",totals);
}
```



6) Write a program to check if a person is eligible to marry or not (male age ≥ 21 and female age ≥ 18).

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

```
void main() {
```

```
    int a=22;
```

```
    int b=21;
```

```
    //int male=(a $\geq$ 21);
```

```
    //int female=(b $\geq$ 18);
```

```
    if ((a $\geq$ 21)&&(b $\geq$ 18)) {
```

```
        printf("elligibal");
```

```
    }
```

```
    else {
```

```
        printf("not elligibal");
```

```
    }
```

```
}
```

