```c
#include<stdio.h>
struct player
{
    char name[20];
    int runs;
};
int main()
{
    int i,s=0;
    struct player a[11]; //a[11] - no. of players
    printf("Enter Name of Player Runs Scored \n");
    printf("-----------------------------------------\n\t");
    for(i=0;i<=10;i++)
    {
        scanf("%s",a[i].name);
        scanf("%d",&a[i].runs);
        printf("\t");
    }
    for(i=0;i<=10;i++)
        s=s+a[i].runs;
    printf("\n-----------------------------------------\n");
    printf("Total Runs Scored by Team: %d",s);
    return 0;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
virat 50
dhoni 30
rohit 40
ashwin 25
raina 36
gautam 20
jadeja 10
dhawan 49
rahane 23
rahul 15

-----------------------------------------
Total Runs Scored by Team: 328
```

```c
#include<stdio.h>
/*Here, we are using nested structure*/
struct student
{
    int roll_num;
    char name[20];
    struct Date
    {
        int D;
        int M;
        int Y;
    }bd,ad;
};
int main()
{
    int r;
    struct student a;
    printf("\tEnter Student Details\n");
    printf("-----------------------------------------------------\n");
    printf("Enter Roll-Number    : ");
    scanf("%d",&a.roll_num);
    printf("Enter Name      : ");
    scanf("%s",a.name);
    printf("Enter Birth-Date     : ");
    scanf("%d-%d-%d",&a.bd.D,&a.bd.M,&a.bd.Y);
    printf("Enter Admission-Date : ");
    scanf("%d-%d-%d",&a.ad.D,&a.ad.M,&a.ad.Y);
    r=a.ad.Y-a.bd.Y;
    printf("-----------------------------------------------------\n");
    printf("\nApproximate Age of Student at the Time of Admission\n");
    printf("-----------------------------------------------------\n");
    printf("\t%d Years",r);
    return 0;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
        Enter Student Details
-----------------------------------------------------
Enter Roll-Number    : 1
Enter Name      : sapna
Enter Birth-Date     : 5-9-1988
Enter Admission-Date : 25-1-2017
-----------------------------------------------------

Approximate Age of Student at the Time of Admission
-----------------------------------------------------
        29 Years
PS C:\Users\lakshmanan\AppData\Local\Temp>
```

```c
#include<stdio.h>
struct employee
{
    int eno;
    char ename[20];
    int salary;
}emp[10];
int main()
{
    int i,high,n;
    printf("/*How many employee info\nyou want to accept : ");
    printf("Enter Limit: ");
    scanf("%d",&n);
    printf("-----------------------------\n");
    printf("Enter details for %d employees:",n);
    printf("\n-----------------------------\n");
    for(i=0;i<n;i++)
    {
        printf("Employee Number: ");
        scanf("%d",&emp[i].eno);
        printf("Name           : ");
        scanf("%s",emp[i].ename);
        printf("Salary         : ");
        scanf("\n %d",&emp[i].salary);
        printf("-----------------------------\n");
    }
    high=emp[0].salary;
    for(i=0;i<n;i++)
    {
        if(emp[i].salary>high)
        high=emp[i].salary;
    }
    printf("Highest salary employee details:");
    printf("\n-----------------------------\n");
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
Salary         : 32000
-----------------------------
Employee Number: 102
Name           : roshan
Salary         : 42000
-----------------------------
Highest salary employee details:
-----------------------------
EMPNO    NAME  SALARY

 102    roshan  42000
PS C:\Users\lakshmanan\AppData\Local\Temp>
```

```c
#include<stdio.h>
struct employee
{
    int e;
    char name[20];
    char designation[20];
    char dept[20];
    int sal;
};
int main()
{
    struct employee a;
    printf("Enter Employee Details:\n");
    printf("------------------------------\n");
    printf("Enter Employee-Id : ");
    scanf("%d",&a.e);
    printf("Enter Name        : ");
    scanf("%s",a.name);
    printf("Enter Designation : ");
    scanf("%s",a.designation);
    printf("Enter Department  : ");
    scanf("%s",a.dept);
    printf("Enter Salary      : ");
    scanf("%d",&a.sal);
    printf("------------------------------");
    printf("\nEmployee Details: \n--------------------------------\n");
    printf("Employee-Id : %d\n",a.e);
    printf("Name        : %s\n",a.name);
    printf("Designation : %s\n",a.designation);
    printf("Department  : %s\n",a.dept);
    printf("Salary      : %d\n",a.sal);
    return 0;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
Enter Name        : parth
Enter Designation : manager
Enter Department  : production
Enter Salary      : 30000
------------------------------
Employee Details:
--------------------------------
Employee-Id : 276
Name        : parth
Designation : manager
Department  : production
Salary      : 30000
```

```c
#include<stdio.h>
struct student
{
    int rno;
    char name[20];
    int marks[3];
    int total;
    float avg;
}stud[2];
int main()
{
    int i,j;
    struct student s;
    for(i=0;i<2;i++)
    {
        printf("Enter Record for Student-%d \n",i+1);
        printf("-----------------------------------\n");
        printf("Enter Roll-No. : ");
        scanf("%d",&stud[i].rno);
        printf("Enter Name     : ");
        scanf("%s",stud[i].name);
        stud[i].total=0;
        for(j=0;j<3;j++)
        {
            printf("Enter Marks of Subject %d : ",j+1);
            scanf("%d",&stud[i].marks[j]);
            stud[i].total=stud[i].total+stud[i].marks[j] ;
            stud[i].avg=stud[i].total/3.0;
        }
        printf("\n-----------------------------------\n");
    }
    for(i=0;i<2;i++)
    {
        for(j=i+1;j<2;j++)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
Enter Marks of Subject 3 : 82

-----------------------------------
Records in Descending Order.
 (According to Total-Marks)
-----------------------------------

 ROLLNO   NAME  TOTAL-MARKS  AVG

 102     roshan  222     74.00
 101     sapna   195     65.00
PS C:\Users\lakshmanan\AppData\Local\Temp>
```

```c
#include<stdio.h>
#include<stdlib.h>
#include<string.h>
struct book
{
    int  b_no;
    char b_name[40];
    char b_author[40];
    int  no_pages;
};
int main()
{
    struct book b[20];
    int    ch,n,i,count = 0;
    char   temp[40];
    do
    {
        printf("\t\tMENU");
        printf("\n-------------------------------------\n");
        printf("PRESS 1.TO ADD BOOK DETAILS.");
        printf("\nPRESS 2.TO DISPLAY BOOK DETAILS.");
        printf("\nPRESS 3.TO DISPLAY BOOK OF GIVEN AUTHOR.");
        printf("\nPRESS 4.TO COUNT NUMBER OF BOOKS.");
        printf("\nPRESS 5.TO EXIT.");
        printf("\n-------------------------------------\n");
        printf("Enter Your Choice: ");
        scanf("%d",&ch);
        switch(ch)
        {
            case 1:
                printf("\nHow Many Records You Want to Add: ");
                scanf("%d",&n);
                printf("-------------------------------------\n");
                printf("Add Details of %d Book\n",n);
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

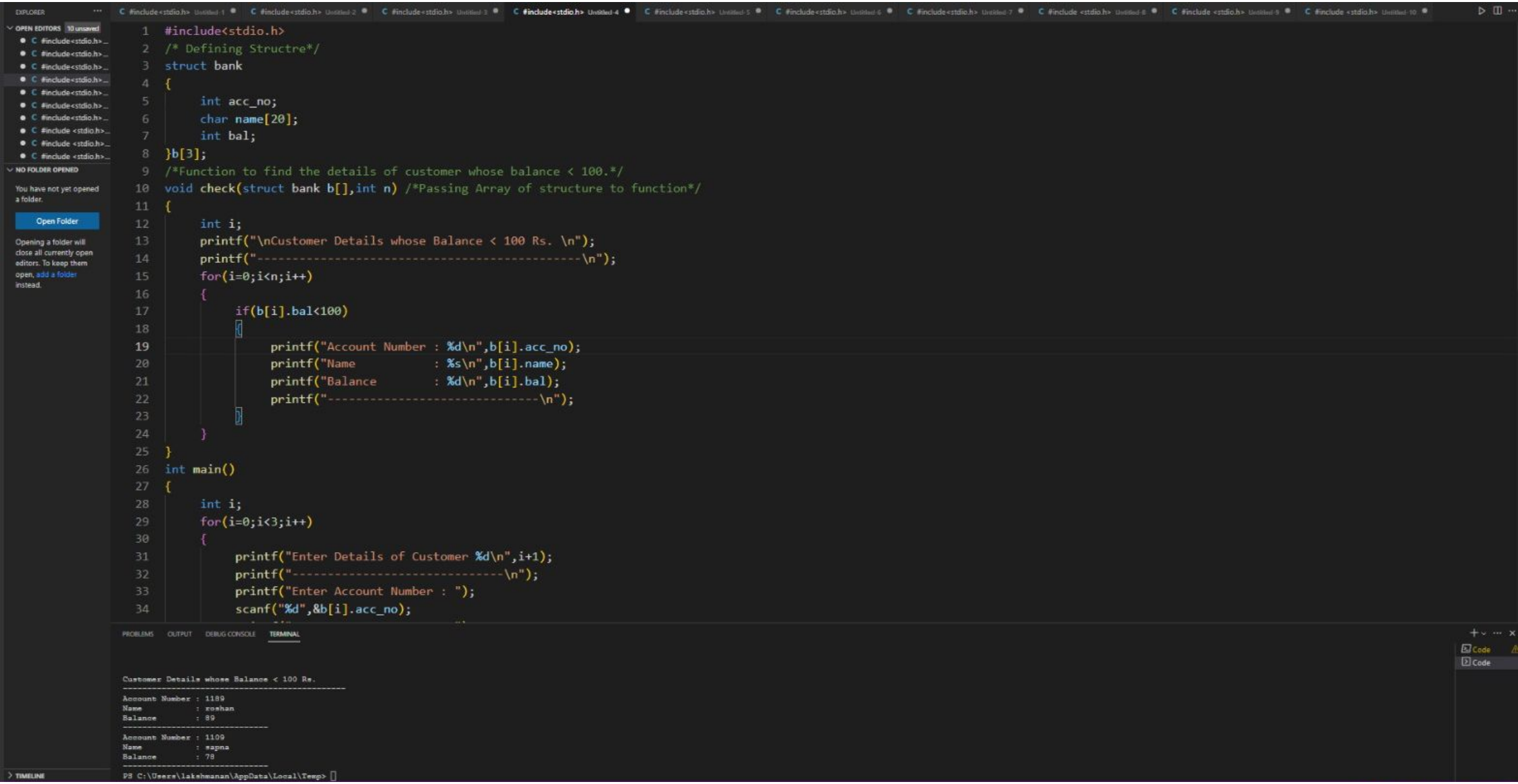
```
-------------------------------------
Enter Book No.      : 1002
Book Name           : c-programming
Enter Author Name   : manas-ghosh
Enter No. of Pages  : 450
-------------------------------------
Enter Book No.      : 1003
Book Name           : networking
Enter Author Name   : tanenbaum
Enter No. of Pages  : 520
-------------------------------------
                MENU
```

```c

int main() {
    union student s;
    char name[50];
    float gpa;

    printf("Enter the student's name: ");
    fgets(name, 50, stdin);
    name[strcspn(name, "\n")] = '\0'; // remove newline character

    printf("Enter the student's GPA: ");
    scanf("%f", &gpa);

    s.gpa = gpa;
    strcpy(s.name, name);

    printf("Student name: %s\n", s.name);
    printf("Student GPA: %.2f\n",gpa);

    return 0;
}

```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

PS C:\Users\lakshmanan\AppData\Local\Temp> cd "C:\Users\LAKSHM~1\AppData\Local\Temp"
PS C:\Users\lakshmanan\AppData\Local\Temp> cd "C:\Users\LAKSHM~1\AppData\Local\Temp\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCod



                                > cd "C:\Users\LAKSHM~1\AppData\Local\Temp\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter the student's name: subash
Enter the student's GPA: 3.5
Student name: subash
Student GPA: 3.50
PS C:\Users\lakshmanan\AppData\Local\Temp>
```

```c
#include <stdio.h>

union Data {
    int i;
    float f;
};

int main() {
    union Data data;
    char inputType;

    printf("Enter a value (integer or float): ");
    scanf("%c", &inputType);

    if (inputType == 'i') {
        printf("Enter an integer value: ");
        scanf("%d", &data.i);
        printf("You entered an integer value: %d\n", data.i);
    } else if (inputType == 'f') {
        printf("Enter a float value: ");
        scanf("%f", &data.f);
        printf("You entered a float value: %f\n", data.f);
    } else {
        printf("Invalid input type.\n");
    }

    return 0;
}
```

```
PS C:\Users\lakshmanan> cd "C:\Users\LAKSHM~1\AppData\Local\Temp"
PS C:\Users\lakshmanan\AppData\Local\Temp> cd "C:\Users\LAKSHM~1\AppData\Local\Temp\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter a value (integer or float): f
Enter a float value: 2.55
You entered a float value: 2.550000
PS C:\Users\lakshmanan\AppData\Local\Temp>
```



```c
#include<stdio.h>
/* Defining Structre*/
struct bank
{
     int acc_no;
     char name[20];
     int bal;
}b[3];
/*Function to find the details of customer whose balance < 100.*/
void check(struct bank b[],int n) /*Passing Array of structure to function*/
{
     int i;
     printf("\nCustomer Details whose Balance < 100 Rs. \n");
     printf("-----------------------------------------------\n");
     for(i=0;i<n;i++)
     {
          if(b[i].bal<100)
          {
               printf("Account Number : %d\n",b[i].acc_no);
               printf("Name           : %s\n",b[i].name);
               printf("Balance        : %d\n",b[i].bal);
               printf("------------------------------\n");
          }
     }
}
int main()
{
     int i;
     for(i=0;i<3;i++)
     {
          printf("Enter Details of Customer %d\n",i+1);
          printf("------------------------------\n");
          printf("Enter Account Number : ");
          scanf("%d",&b[i].acc_no);
```

```
Customer Details whose Balance < 100 Rs.
-----------------------------------------------
Account Number : 1189
Name           : roshan
Balance        : 89
------------------------------
Account Number : 1109
Name           : sapna
Balance        : 78
------------------------------
PS C:\Users\lakshmanan\AppData\Local\Temp>
```

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

union shape {
    float radius;
    struct {
        float length;
        float width;
    } rectangle;
};

int main() {
    union shape s;
    char shape_type;

    printf("Enter the type of shape you want to calculate (c for circle, r for rectangle): ");
    scanf("%c", &shape_type);

    if (shape_type == 'c') {
        printf("Enter the radius of the circle: ");
        scanf("%f", &s.radius);
        float area = M_PI * pow(s.radius, 2);
        printf("The area of the circle is: %.2f\n", area);
    }
    else if (shape_type == 'r') {
        printf("Enter the length of the rectangle: ");
        scanf("%f", &s.rectangle.length);
        printf("Enter the width of the rectangle: ");
        scanf("%f", &s.rectangle.width);
        float area = s.rectangle.length * s.rectangle.width;
        printf("The area of the rectangle is: %.2f\n", area);
    }
    else {
        printf("Invalid shape type!\n");
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
> cd "C:\Users\LAKSHM~1\AppData\Local\Temp\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter the type of shape you want to calculate (c for circle, r for rectangle): c
Enter the radius of the circle: 5
The area of the circle is: 78.54
PS C:\Users\lakshmanan\AppData\Local\Temp>
```