Note: minimum 30, count would be require huge input ∴ for convinence & took minimum count of course = 4.

7.
```
#include <stdio.h>
struct course
{
  chare name[20];
};
int main()
{
  Struct course s[4][100];
  int n,i,j, c[3]={0,0,0}, choice;
  char cn[3][10]={"IOT", "JAVA", "J2EE", "DS"};
  printf("Enter no. of students:\n");
  scanf("Enter student details:\n");
  for(i=0; i<n; i++)
  {
    printf("----\n");
  printf("Press code to select cource:\n1) IOT\n2) ADVACED JAVA\n3) J2EE\n4) DATA STRUCTURES\n");
  scanf("%d", &choice);
  if(choice<0 || choice>4)
{
printf("ENVALID CHOICE!");
} continue;
printf("Enter name of student %d:\n",i+1);
```

```
scanf("%s", &s[choice-1][c[choice-1].name]);
c[choice-1]++;
}
disp:
for(i=0; i<4; i++)
{ if(c[i]>=0)
  {
  printf("List of students of course
          %d:\n", cn[i]);
for(j=0; j<c[i]; j++)
{
printf("%d) %s\n", j+1, s[i][j]);
}
}
}
for (i=0; i<=4; i++)
{ if (i==0){
if(((c[0]>4)||(c[0]==-1))&&((c[1]>4)
  ||(c[1]==-1))&&((c[2]>4)||(c[2]==-1)
  &&((c[3]>4)||(c[3]==-1)))
  {
    exit(0);
  }
}
}
```

```
if (c[i] < 4 && c[i] != -1)
{
printf("Number of people less than 4 in
        course %s, please change the
        course: \n", cn[i]);
for (j = 0; j < c[i]; j++)
{
printf ("Enter course code: \n");
scanf ("%d", &choice);
if (choice == i+1){
printf (" Enter other course! \n");
continue;
}
printf (" Enter name: \n");
scanf ("%s", s[choice-1][c[choice-1]
        .name);
c[choice-1]++;
}
n = c[i];
c[i] = -1;
}
}
goto disp;
}
```

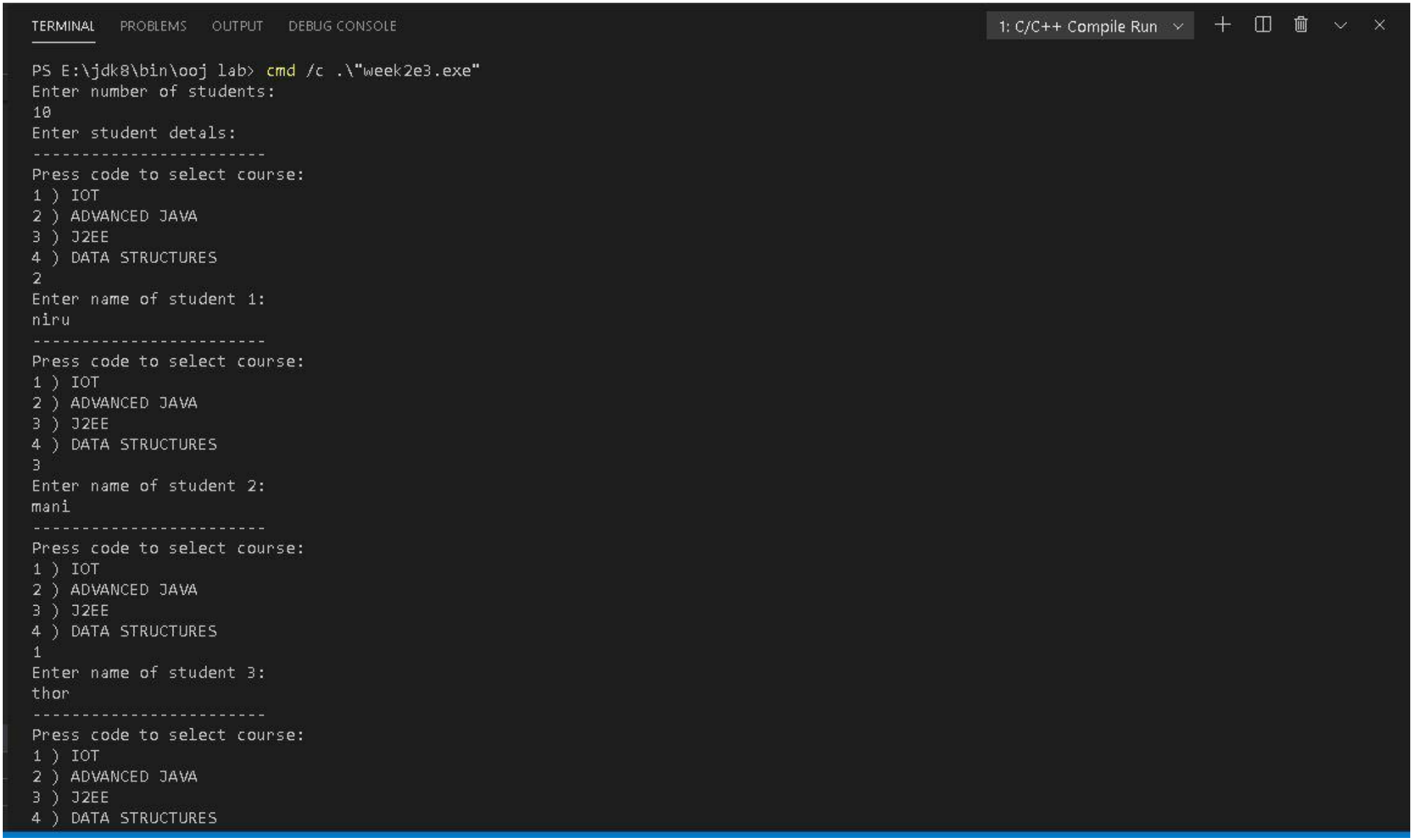
week2e3.c > main()

```c
#include <stdio.h>
struct course
{
char name[20];
} s[4][100];
void main()
{

int n,i,j,c[4]={0,0,0,0},choice;
char cn[4][10]={"IOT","JAVA","J2EE","DS"};
printf("Enter number of students:\n");
scanf("%d",&n);
printf("Enter student detals:\n");
for(i=0;i<n;i++)
{
printf("------------------------\n");
printf("Press code to select course:\n1 ) IOT\n2 ) ADVANCED JAVA\n3 ) J2EE\n4 ) DATA STRUCTURES\n");
scanf("%d",&choice);
if(choice<0||choice>4)
{
printf("INVALID CHOICE!");
continue;
}
printf("Enter name of student %d:\n",i+1);
scanf("%s",&s[choice-1][c[choice-1]].name);
c[choice-1]++;
}

disp:
```

week2e3.c > main()

```
30  for(i=0;i<4;i++)
31  { if(c[i]>=0)
32  {
33  printf("LIST OF STUDENTS OF COURSE %s :\n",cn[i]);
34  for(j=0;j<c[i];j++)
35  {
36  printf("%d) %s \n",j+1,s[i][j]);
37  }
38  }
39  }
40  for(i=0;i<4;i++)
41  { if(i==0){
42      if ((((c[0] > 4) || (c[0] == -1)) && ((c[1] > 4) || (c[1] == -1)) && ((c[2] > 4) || (c[2] == -1)) && ((c[3] > 4) |
        | (c[3] == -1)))
43      {
44          exit(0);
45      }
46  }
47  if(c[i]<4&&c[i]!=-1)
48  {
49  printf("Number of people less than 4 in course %s,please change the course:\n",cn[i]);
50  for(j=0;j<c[i];j++)
51  {
52  printf("Enter course code:\n");
53  scanf("%d",&choice);
54  if(choice==i+1){
55  printf("ENTER OTHER course!\n");
56  continue;
57  }
58  printf("Enter name:\n");
59  scanf("%s",&s[choice-1][c[choice-1]].name);
60  c[choice-1]++;
61  }
```

```
61  }
62  n=c[i];
63  c[i]=-1;
64  }
65  }
66
67  goto disp;
68  }
```

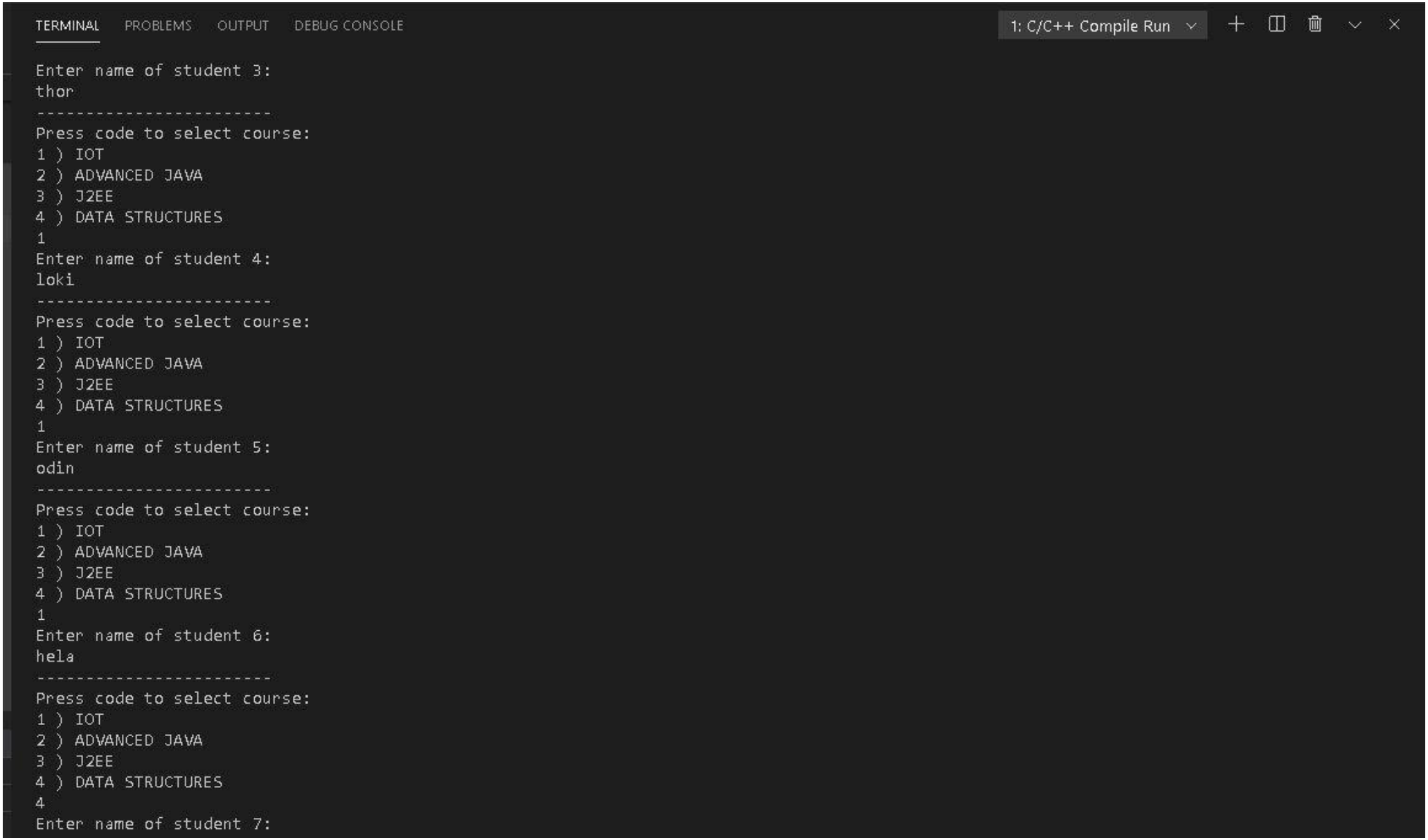

TERMINAL
PROBLEMS
OUTPUT
DEBUG CONSOLE
1: C/C++ Compile Run
PS E:\jdk8\bin\ooj lab> cmd /c .\"week2e3.exe"
Enter number of students:
10
Enter student detals:

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES
2
Enter name of student 1:
niru

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES
3
Enter name of student 2:
mani

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES
1
Enter name of student 3:
thor

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES

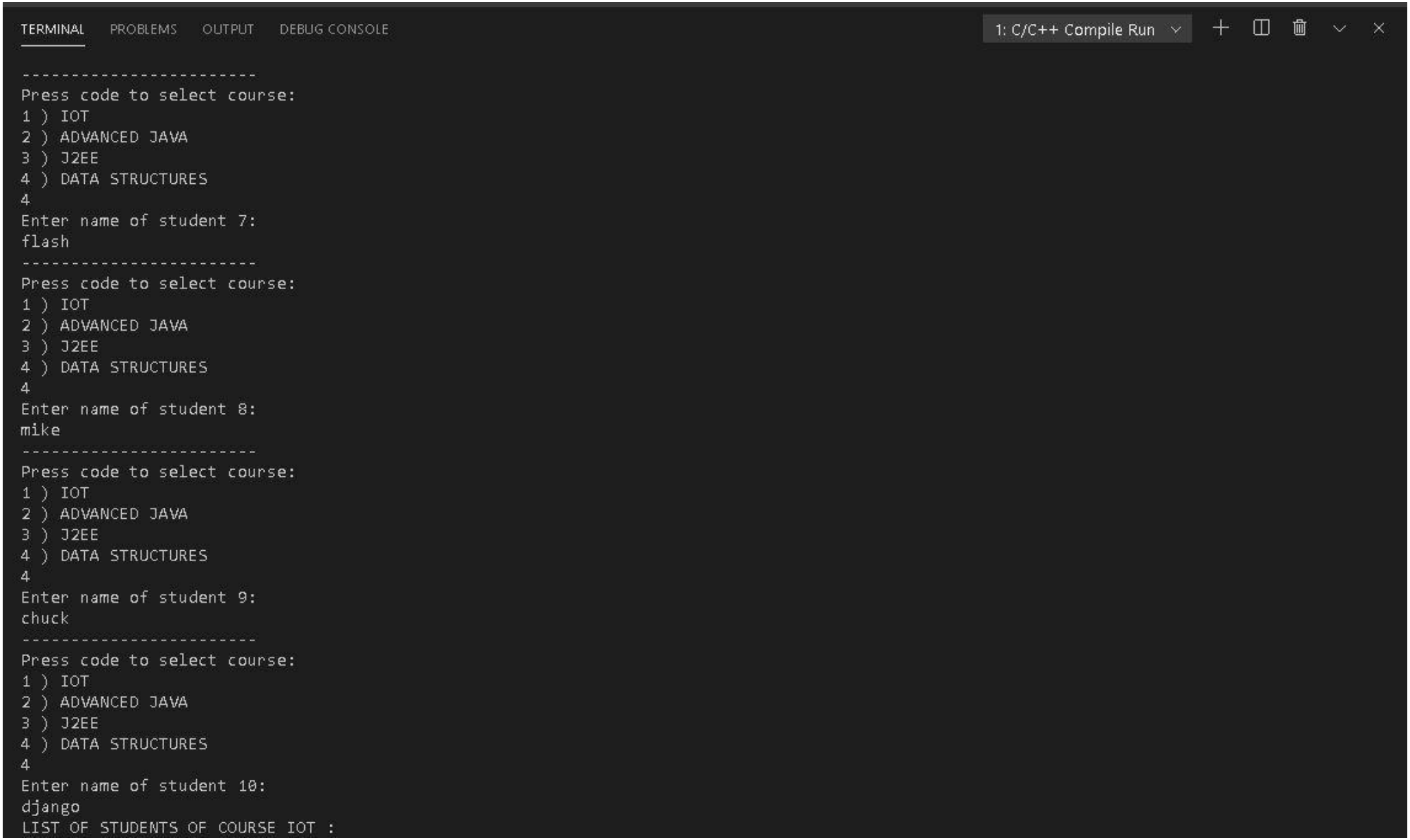

TERMINAL
PROBLEMS
OUTPUT
DEBUG CONSOLE
1: C/C++ Compile Run
Enter name of student 3:
thor

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES
1
Enter name of student 4:
loki

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES
1
Enter name of student 5:
odin

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES
1
Enter name of student 6:
hela

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES
4
Enter name of student 7:

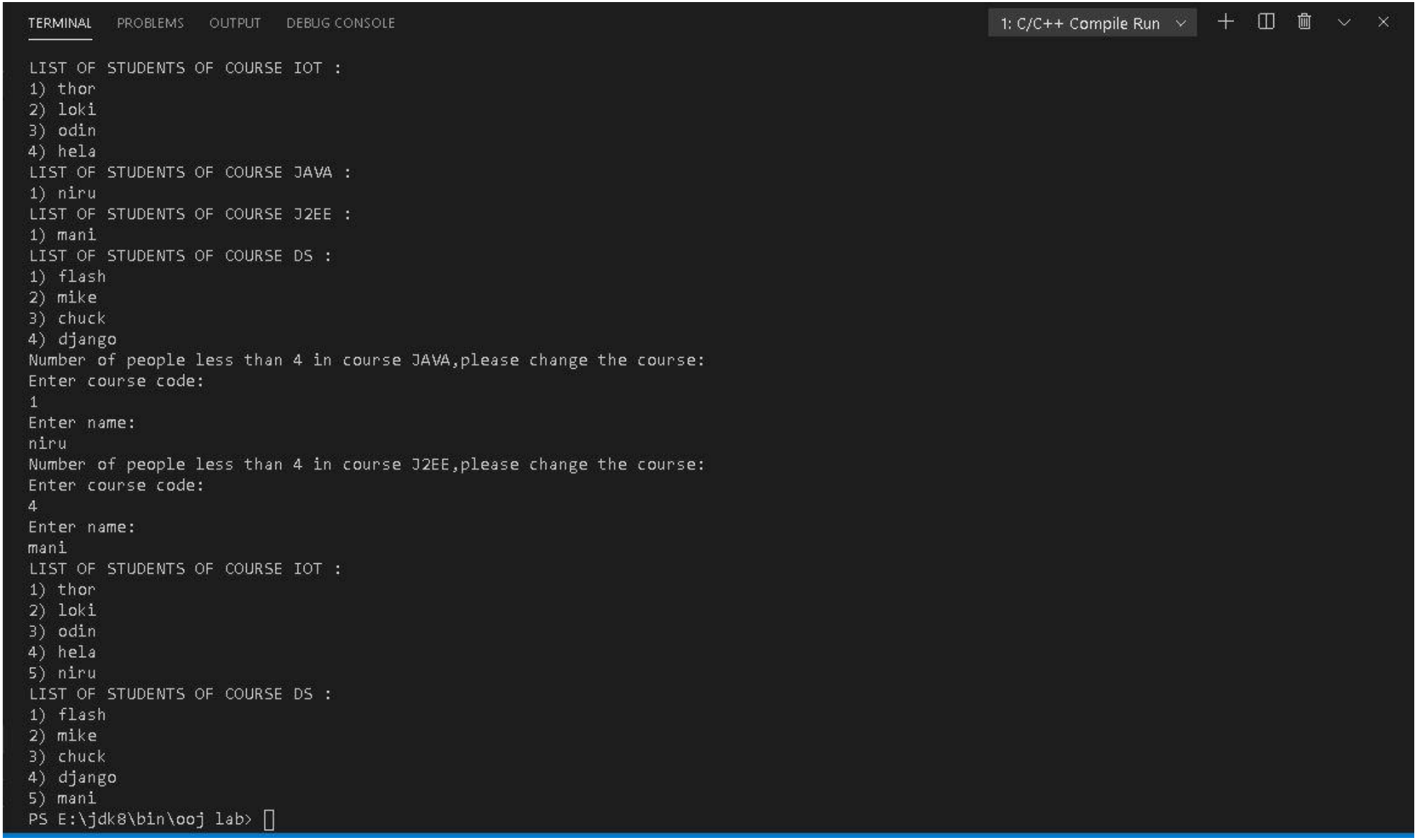

TERMINAL
PROBLEMS
OUTPUT
DEBUG CONSOLE
1: C/C++ Compile Run

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES
4
Enter name of student 7:
flash

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES
4
Enter name of student 8:
mike

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES
4
Enter name of student 9:
chuck

Press code to select course:
1) IOT
2) ADVANCED JAVA
3) J2EE
4) DATA STRUCTURES
4
Enter name of student 10:
django
LIST OF STUDENTS OF COURSE IOT :


TERMINAL
PROBLEMS
OUTPUT
DEBUG CONSOLE
1: C/C++ Compile Run
LIST OF STUDENTS OF COURSE IOT :
1) thor
2) loki
3) odin
4) hela
LIST OF STUDENTS OF COURSE JAVA :
1) niru
LIST OF STUDENTS OF COURSE J2EE :
1) mani
LIST OF STUDENTS OF COURSE DS :
1) flash
2) mike
3) chuck
4) django
Number of people less than 4 in course JAVA,please change the course:
Enter course code:
1
Enter name:
niru
Number of people less than 4 in course J2EE,please change the course:
Enter course code:
4
Enter name:
mani
LIST OF STUDENTS OF COURSE IOT :
1) thor
2) loki
3) odin
4) hela
5) niru
LIST OF STUDENTS OF COURSE DS :
1) flash
2) mike
3) chuck
4) django
5) mani
PS E:\jdk8\bin\ooj lab>