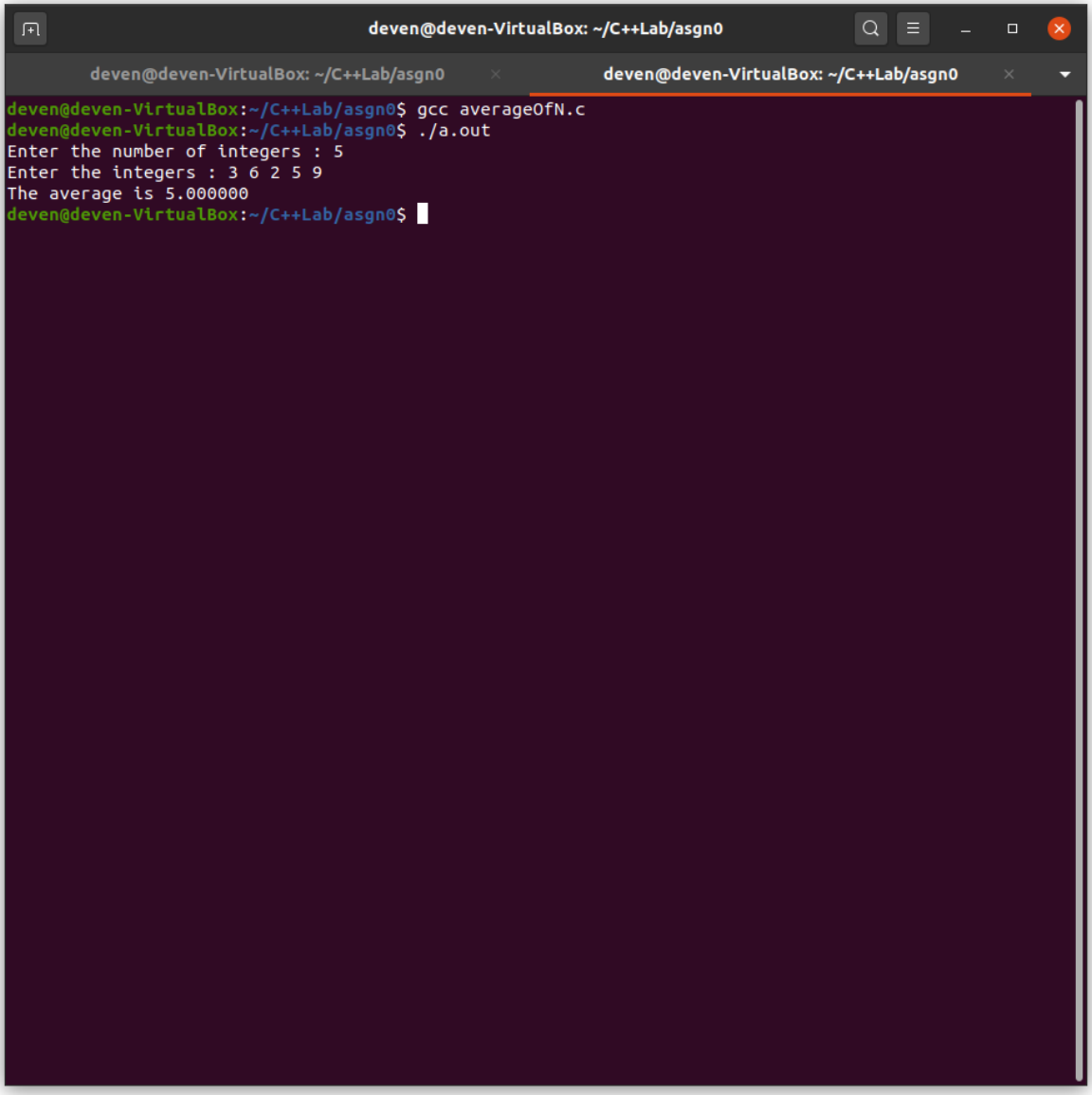
A1 : Program to compute average of N nos

```
#include <stdio.h>

int main()
{
   int n,number,sum=0;
   float avg;
   printf("Enter the number of integers : ");
   scanf("%d",&n);
   printf("Enter the integers : ");
   for(int i=0;i<n;++i)
   {
      scanf("%d",&number);
      sum+=number;
   }
   avg=(float)sum/n;
   printf("The average is %f\n",avg);
   return 0;
}
```

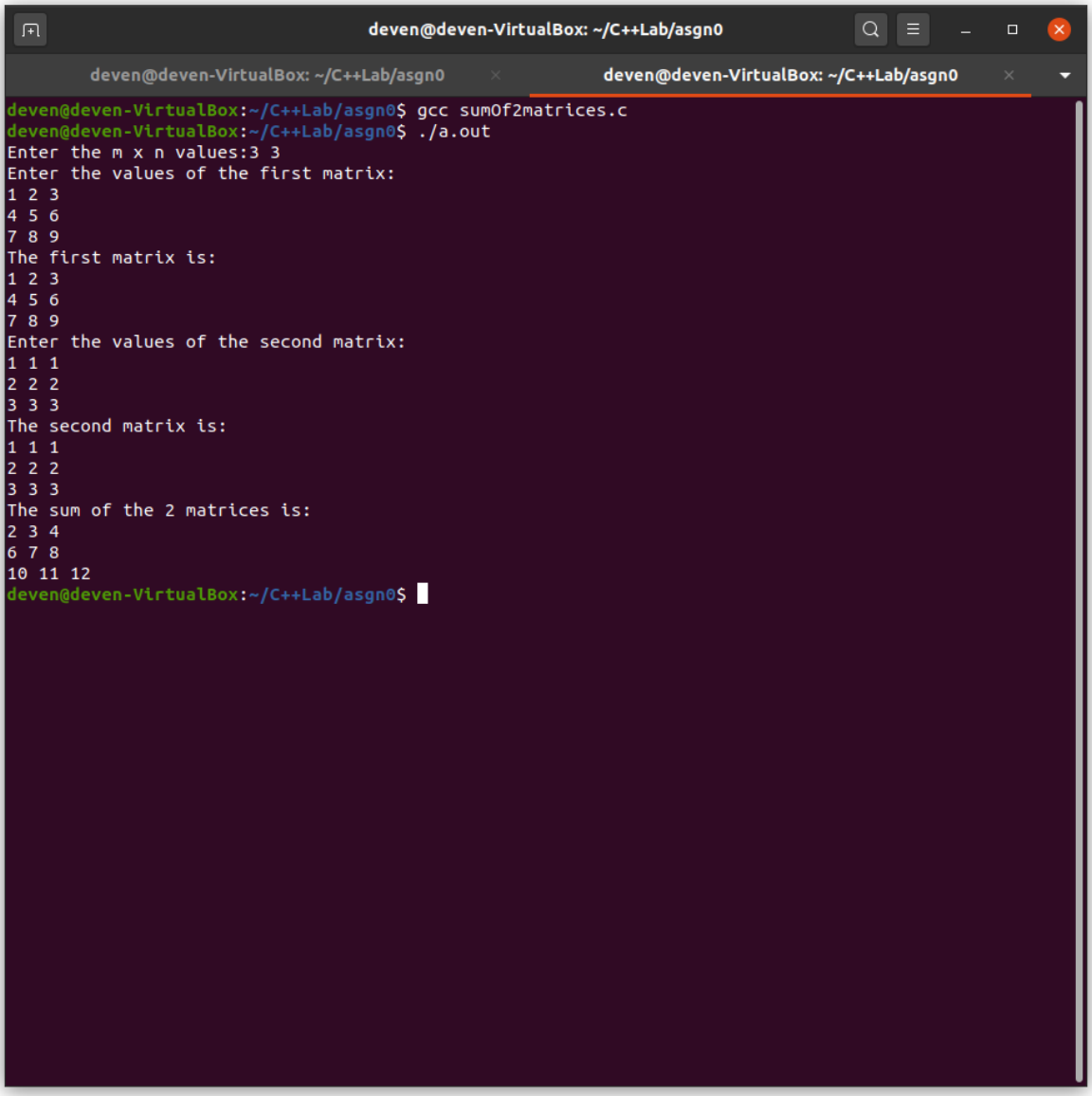


A2. program to add two matrices

```
#include <stdio.h>

void input_matrix(int m,int n,int matrix[][n])
{
   for(int i=0;i<m;++i)
      for(int j=0;j<n;++j)
         scanf("%d",&matrix[i][j]);
```

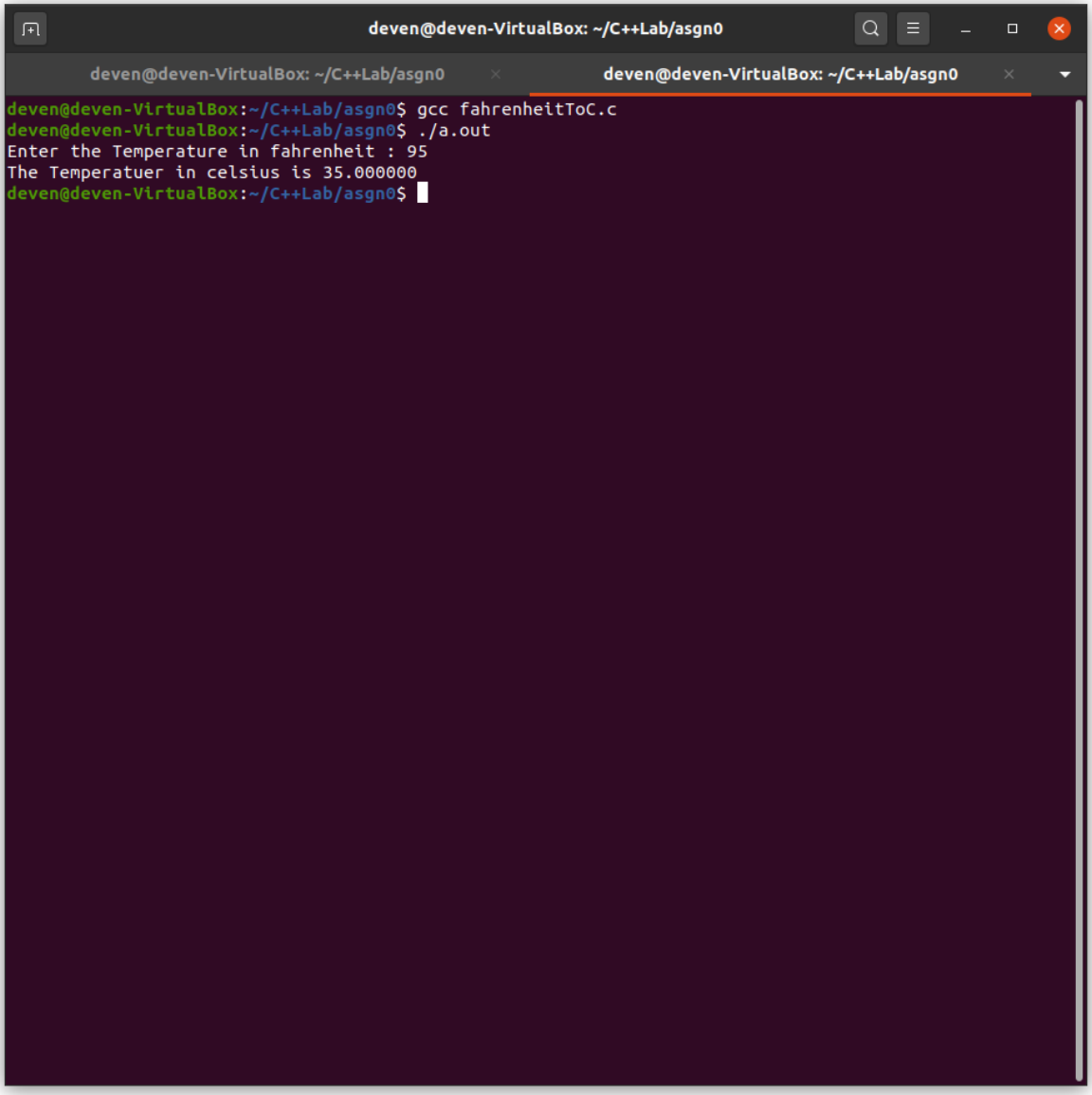
```
}

void print_matrix(int m,int n,int matrix[][n])
{
   for(int i=0;i<m;++i){
      for(int j=0;j<n;++j){
         printf("%d ",matrix[i][j]);
      }
      printf("\n");
   }
}

void add_matrices(int m,int n,int matrix1[][n],int matrix2[][n], int sum[][n])
{
   for(int i=0;i<m;++i)
      for(int j=0;j<n;++j)
         sum[i][j]=matrix1[i][j]+matrix2[i][j];
}

int main()
{
   int m,n;
   printf("Enter the m x n values:");
   scanf("%d%d",&m,&n);
   int matrix1[m][n],matrix2[m][n],sum[m][n];
   printf("Enter the values of the first matrix:\n");
   input_matrix(m,n,matrix1);
   printf("The first matrix is:\n");
   print_matrix(m,n,matrix1);
   printf("Enter the values of the second matrix:\n");
   input_matrix(m,n,matrix2);
```

```
    printf("The second matrix is:\n");
    print_matrix(m,n,matrix2);
    add_matrices(m,n,matrix1,matrix2,sum);
    printf("The sum of the 2 matrices is:\n");
    print_matrix(m,n,sum);
    return 0;
}
```



A3 : Convert temperature in fahrenheit to Celsius

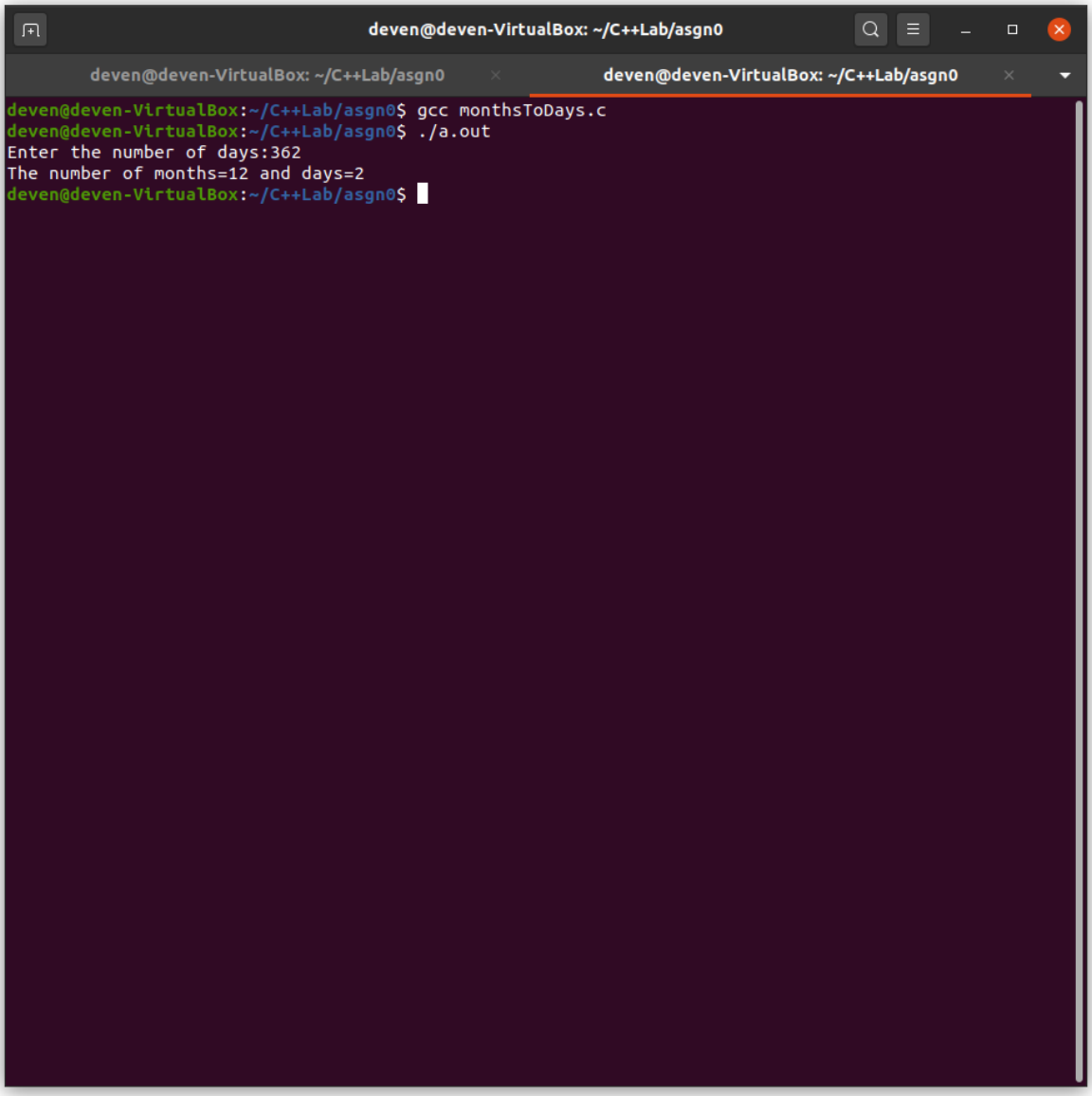
```c
#include <stdio.h>

int main()
{
   float Tf,Tc;
   printf("Enter the Temperature in fahrenheit : ");
   scanf("%f",&Tf);
   Tc=(Tf-32)/1.8;
   printf("The Temperatuer in celsius is %f\n",Tc);
   return 0;
}
```



A4 : CONVERT DAYS TO MONTHS AND DAYS

```
#include <stdio.h>
int main()
{
   int ndays,m,d;
   printf("Enter the number of days:");
   scanf("%d",&ndays);
   m=(int)ndays/30;
```

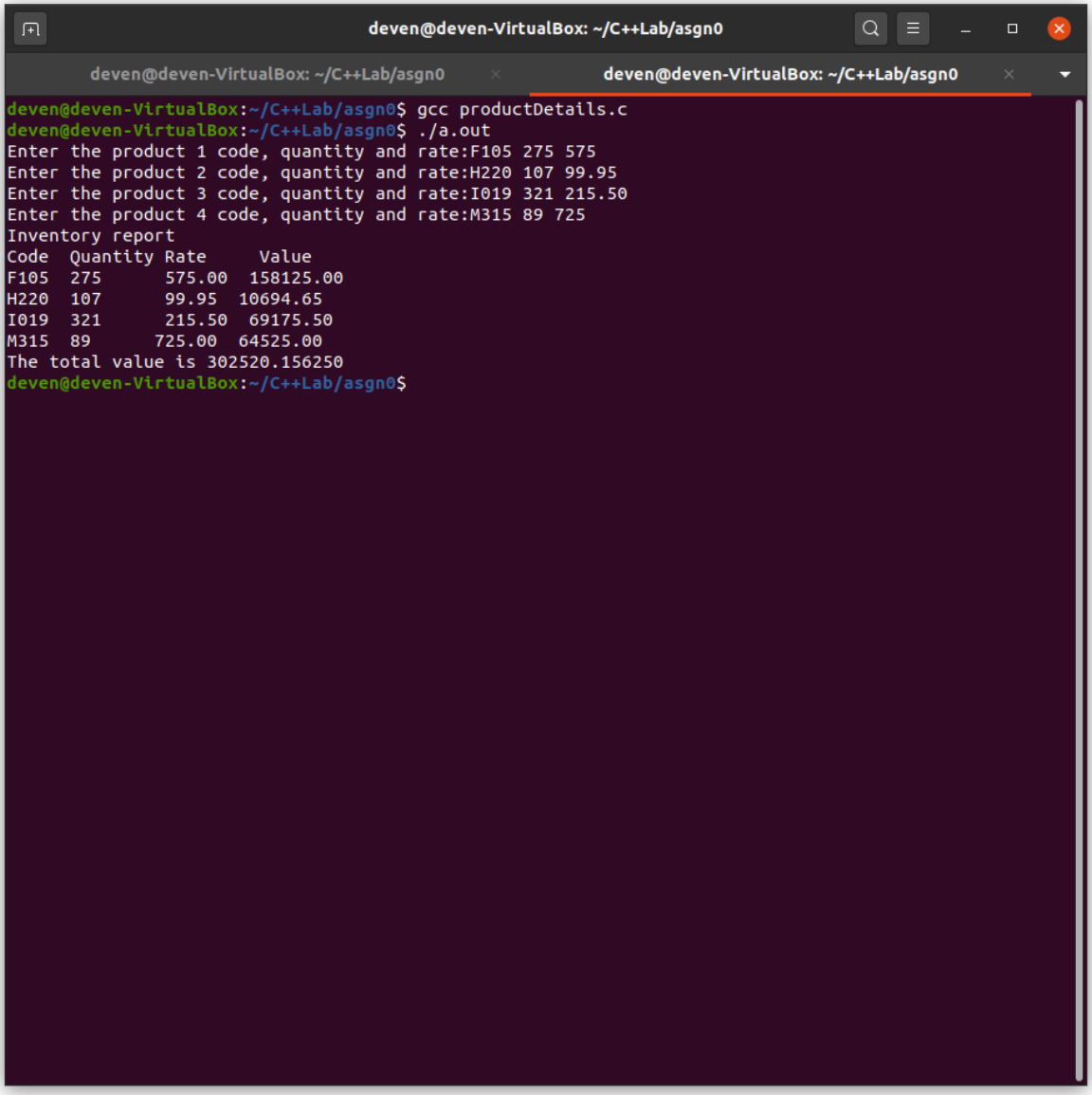
```
    d=(int)(ndays-m*30);
    printf("The number of months=%d and days=%d\n",m,d);
    return 0;
}
```



A5 : Inventory Report

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

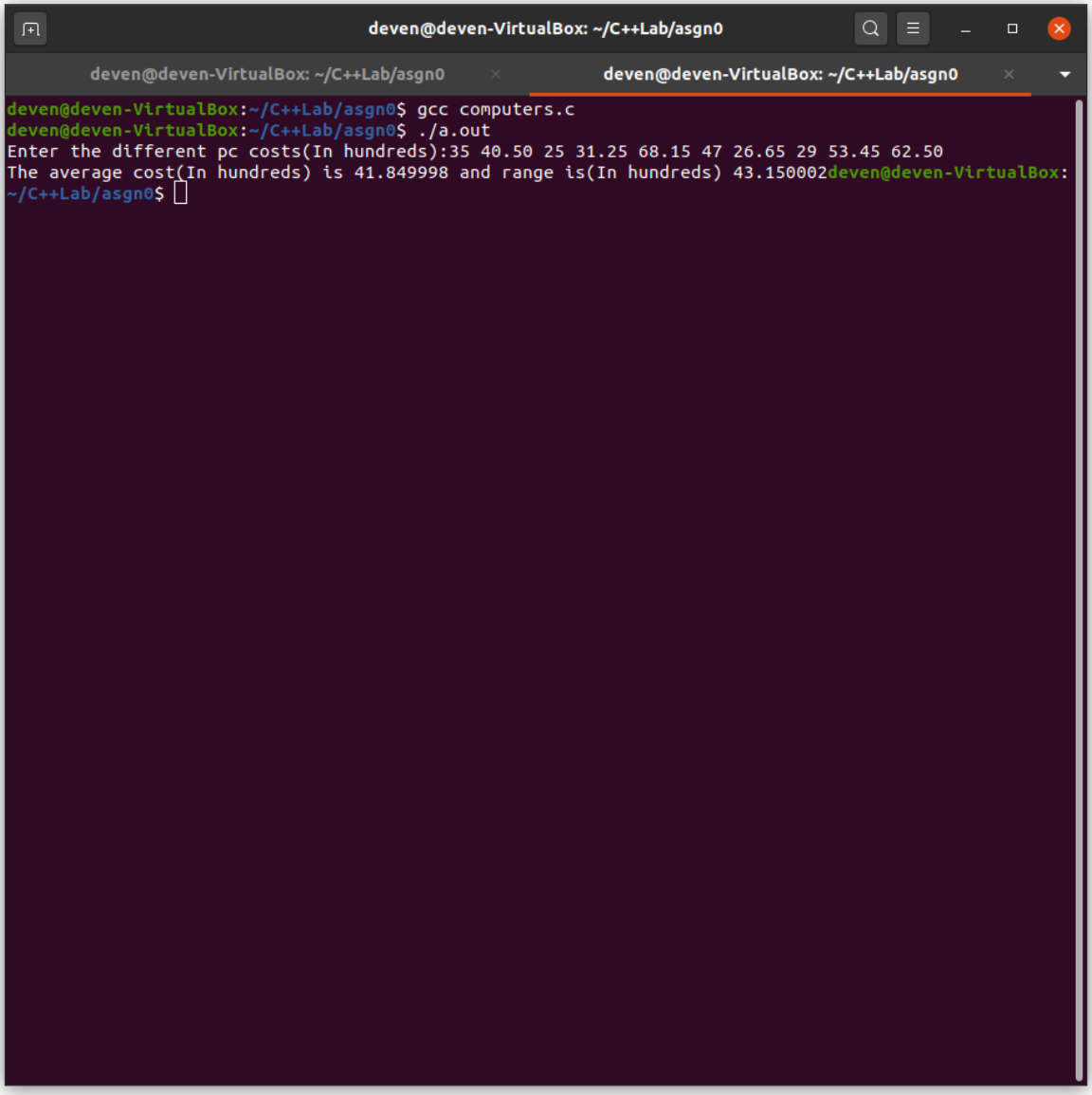
```
struct product
{
   char code[5];
   int quantity;
   float rate;
   float value;
};
typedef struct product Product;

int main()
{
   Product p[4];
   float totvalue=0;
   for(int i=0;i<4;++i)
   {
      printf("Enter the product %d code, quantity and rate:",i+1);
      scanf("%s%d%f",p[i].code,&p[i].quantity,&p[i].rate);
      p[i].value=p[i].quantity*p[i].rate;
      totvalue+=p[i].value;
   }
         printf("Inventory report\n");
         printf("Code  Quantity Rate     Value\n");
         for(int i=0;i<4;++i)
                  printf("%s  %d      %.2f  %.2f\n",p[i].code,p[i].quantity,p[i].rate,p[i].value);
   printf("The total value is %f\n",totvalue);
   return 0;
}
```



A6: Determine average cost and the range of values and range of a varying costs of computers (in hundreds)

```
#include <stdio.h>

int main()
{
   float cost[10],avgcost,sum=0,hcost=0,lcost=0,range;
   printf("Enter the different pc costs(In hundreds):");
   for(int i=0;i<10;++i)
```

```
    {
        scanf("%f",&cost[i]);
        sum+=cost[i];
    }
    avgcost=sum/10;
    hcost=lcost=cost[0];
    for(int i=1;i<10;++i)
    {
        if(cost[i]>hcost)
            hcost=cost[i];
        if(cost[i]<lcost)
            lcost=cost[i];
    }
    range=hcost-lcost;
    printf("The average cost(In hundreds) is %f and range is(In hundreds) %f",avgcost,range);
    return 0;
}
```


deven@deven-VirtualBox: ~/C++Lab/asgn0
deven@deven-VirtualBox: ~/C++Lab/asgn0
deven@deven-VirtualBox: ~/C++Lab/asgn0
deven@deven-VirtualBox:~/C++Lab/asgn0$ gcc computers.c
deven@deven-VirtualBox:~/C++Lab/asgn0$ ./a.out
Enter the different pc costs(In hundreds):35 40.50 25 31.25 68.15 47 26.65 29 53.45 62.50
The average cost(In hundreds) is 41.849998 and range is(In hundreds) 43.150002deven@deven-VirtualBox:
~/C++Lab/asgn0$