

# Week 2

## Problem 1

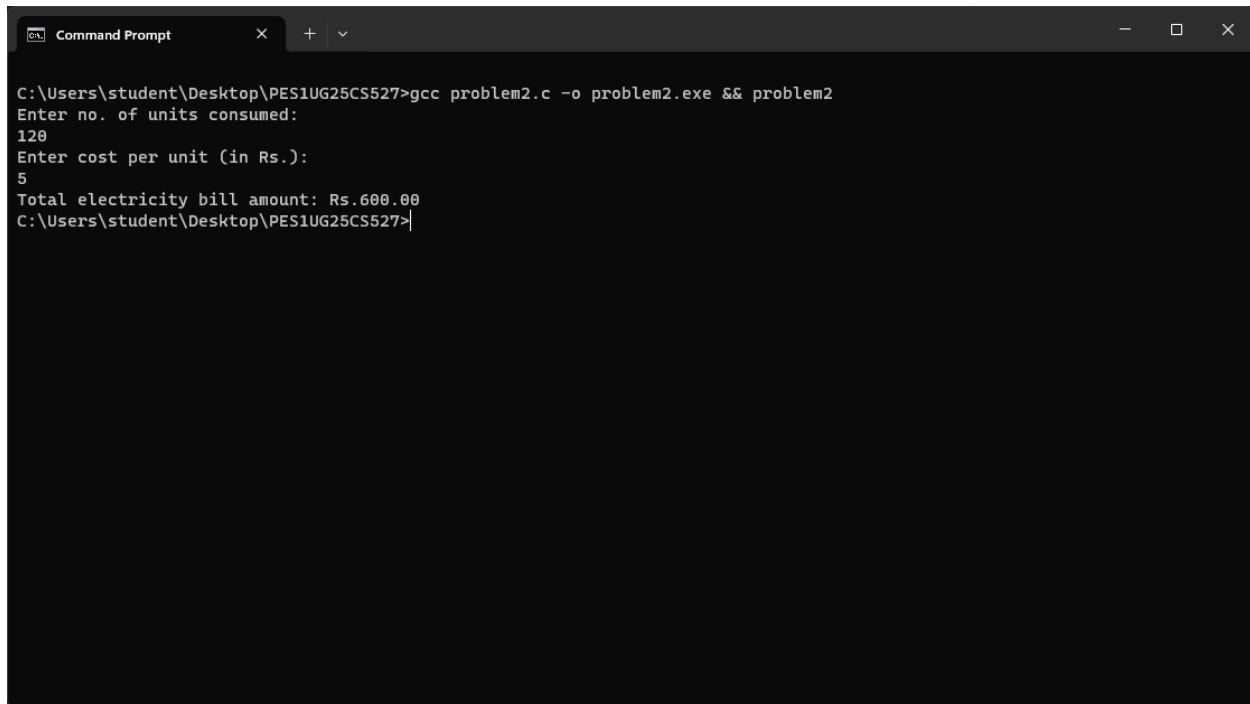
```
/*
 * Author: Soham Shashank
 * SRN: PES1UG25CS527
 */
#include <stdio.h>
int main()
{
    int rnum,m1,m2,m3,m4,m5,total;
    float avg;
    printf("Enter the roll number: \n");
    scanf(" %d",&rnum);
    printf("Enter marks obtained in 5 subjects: \n");
    scanf(" %d %d %d %d %d",&m1,&m2,&m3,&m4,&m5);
    total=m1+m2+m3+m4+m5;
    avg=total/5;
    printf("Total marks:%d Average:%f",total,avg);
    return 0;
}
```

```
Command Prompt
C:\Users\student\Desktop\PES1UG25CS527>gcc problem1.c -o problem1.exe && problem1
Enter the roll number:
40
Enter marks obtained in 5 subjects:
100 90 99 98 95
Total marks:482 Average:96.00
C:\Users\student\Desktop\PES1UG25CS527>
```

## Problem 2

```
/*
 * Author: Soham Shashank
 * SRN: PES1UG25CS527
 */
#include <stdio.h>
int main()
{
    int units;
    float cpu,amt;
    printf("Enter no. of units consumed: \n");
    scanf(" %d",&units);
    printf("Enter cost per unit(in Rs.): \n");
    scanf(" %f",&cpu);
    amt=units*cpu;
    printf("Total electricity bill amount: Rs.%.2f",amt);
}
```

```
    return 0;
}
```



```
Command Prompt
C:\Users\student\Desktop\PES1UG25CS527>gcc problem2.c -o problem2.exe && problem2
Enter no. of units consumed:
120
Enter cost per unit (in Rs.):
5
Total electricity bill amount: Rs.600.00
C:\Users\student\Desktop\PES1UG25CS527>
```

### Problem 3

```
/******
Author Soham Shashank
SRN PES1UG25CS527
*****/
#include <stdio.h>
int main(){
    int emp_id;
    float basicAllowance,hra,dearAllowance,gross;
    printf("Enter employee ID: ");
    scanf("%d",&emp_id);
    printf("Enter basic salary: ");
    scanf("%f",&basicAllowance);
    hra = 0.2*basicAllowance;
    dearAllowance = 0.15*basicAllowance;
```

```

    gross = (basicAllowance - hra - dearAllowance);
    printf("Gross salary: %.2f",gross);
    return 0;
}

```

```

C:\Users\student\Desktop\PES1UG25CS527>gcc problem3.c -o a.exe && a
Enter employee ID: 101
Enter basic salary: 200000
Gross salary: 130000.00
C:\Users\student\Desktop\PES1UG25CS527>

```

#### Problem 4

```

/*
 * Author: Soham Shashank
 * SRN: PES1UG25CS527
 */

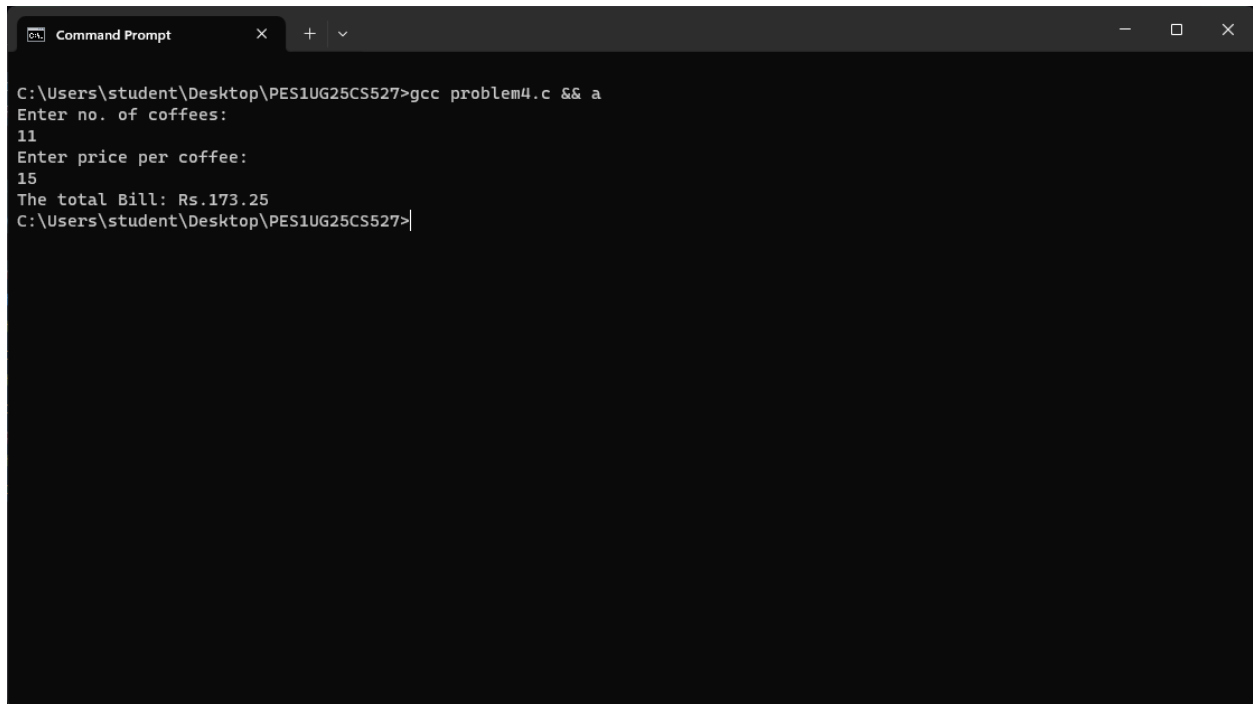
#include <stdio.h>
int main()
{
    int n;
    float cp,bl;
    printf("Enter no. of coffees:\n");
    scanf(" %d",&n);
}

```

```

    printf("Enter price per coffee:\n");
    scanf(" %f",&cp);
    bl=cp*n+cp*n*0.05;
    printf("The total Bill: Rs.%.2f",bl);
    return 0;
}

```



```

C:\Users\student\Desktop\PES1UG25CS527>gcc problem4.c && a
Enter no. of coffees:
11
Enter price per coffee:
15
The total Bill: Rs.173.25
C:\Users\student\Desktop\PES1UG25CS527>

```

## Problem 5

```

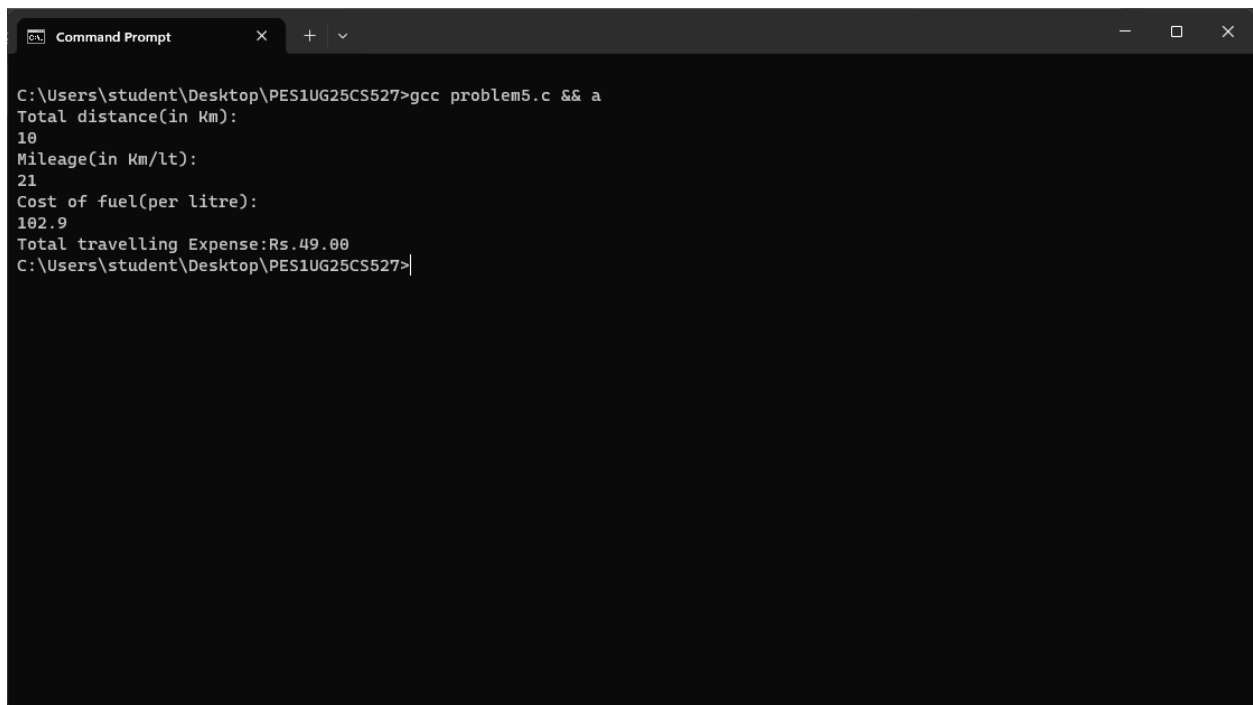
/*
 * Author: Soham Shashank
 * PES1UG25CS527
 */
#include <stdio.h>
int main()
{
    float td,mil,cfp,exp;
    printf("Total distance(in Km):\n");
    scanf(" %f",&td);
}

```

```

    printf("Mileage(in Km/lt):\n");
    scanf(" %f",&mil);
    printf("Cost of fuel(per litre):\n");
    scanf(" %f",&cfp);
    exp=td/mil*cfp;
    printf("Total travelling Expense:Rs.%.2f",exp);
    return 0;
}

```



```

C:\Users\student\Desktop\PES1UG25CS527>gcc problem5.c && a
Total distance(in Km):
10
Mileage(in Km/lt):
21
Cost of fuel(per litre):
102.9
Total travelling Expense:Rs.49.00
C:\Users\student\Desktop\PES1UG25CS527>

```

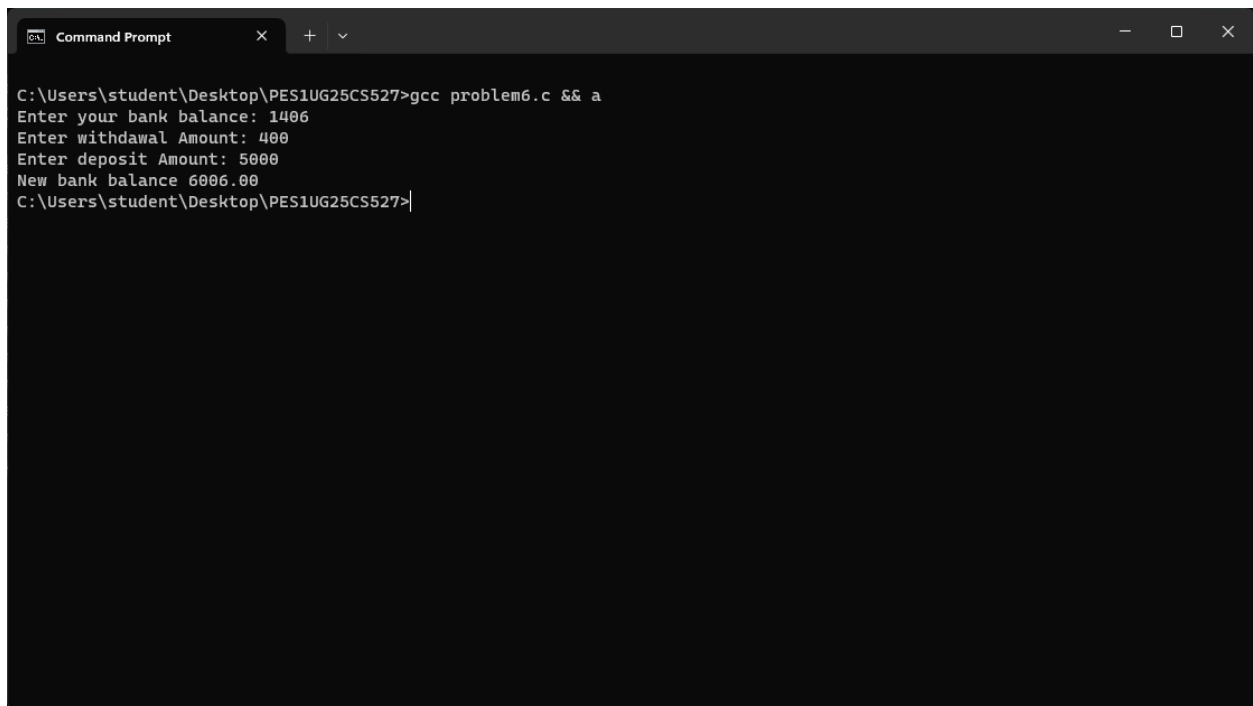
## Problem 6

```

/*
 * Author: Soham Shashank
 * PES1UG25CS527
 */
#include <stdio.h>
int main(){
    float bankBalance,withdrawAmount,depositAmount,balance;

```

```
printf("Enter your bank balance: ");
scanf("%f",&bankBalance);
printf("Enter withdawal Amount: ");
scanf("%f",&withdrawAmount);
printf("Enter deposit Amount: ");
scanf("%f",&depositAmount);
balance = bankBalance + depositAmount - withdrawAmount;
printf("New bank balance %.2f",balance);
return 0;
}
```

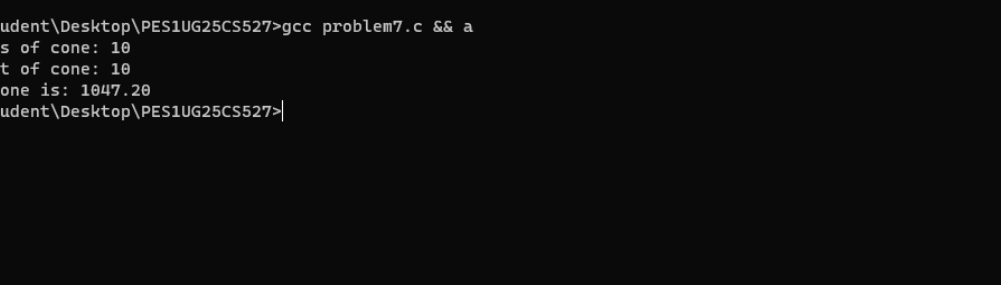


```
Command Prompt
C:\Users\student\Desktop\PES1UG25CS527>gcc problem6.c && a
Enter your bank balance: 1406
Enter withdawal Amount: 400
Enter deposit Amount: 5000
New bank balance 6006.00
C:\Users\student\Desktop\PES1UG25CS527>|
```

## Problem 7

```
/*
 * Author: Soham Shashank
 * PES1UG25CS527
 */
#include <stdio.h>
```

```
int main(){  
    float pi = 3.141592653589793238764623884197165390761;  
    float r,h,vol;  
    printf("Enter radius of cone: ");  
    scanf("%f",&r);  
    printf("Enter height of cone: ");  
    scanf("%f",&h);  
    vol = 0.33333333333333333333333333333333*pi*r*r*h;  
    printf("Volume of cone is: %.2f",vol);  
    return 0;  
}
```



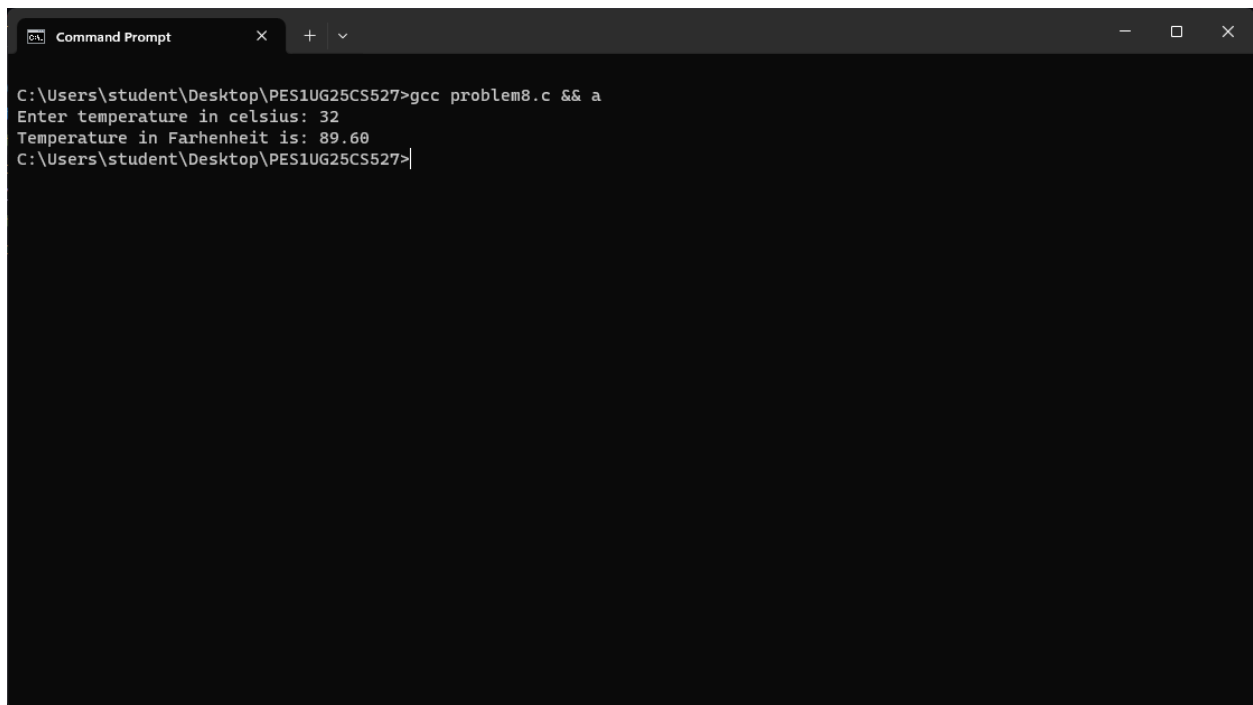
```
C:\Users\student\Desktop\PES1UG25CS527>gcc problem7.c && a
Enter radius of cone: 10
Enter height of cone: 10
Volume of cone is: 1047.20
C:\Users\student\Desktop\PES1UG25CS527>|
```

### Problem 8

```
/*
 * Author: Soham Shashank
 * SRN: PES1UG25CS527
 */
#include <stdio.h>
```



```
int main(){
    float c,f;
    printf("Enter temperature in celsius: ");
    scanf("%f",&c);
    f = 1.8*c+32;
    printf("Temperature in Farhenheit is: %.2f",f);
    return 0;
}
```



The screenshot shows a Windows Command Prompt window with the title bar "Command Prompt". The window contains the following text:

```
C:\Users\student\Desktop\PES1UG25CS527>gcc problem8.c && a
Enter temperature in celsius: 32
Temperature in Farhenheit is: 89.60
C:\Users\student\Desktop\PES1UG25CS527>|
```