

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;
}
```



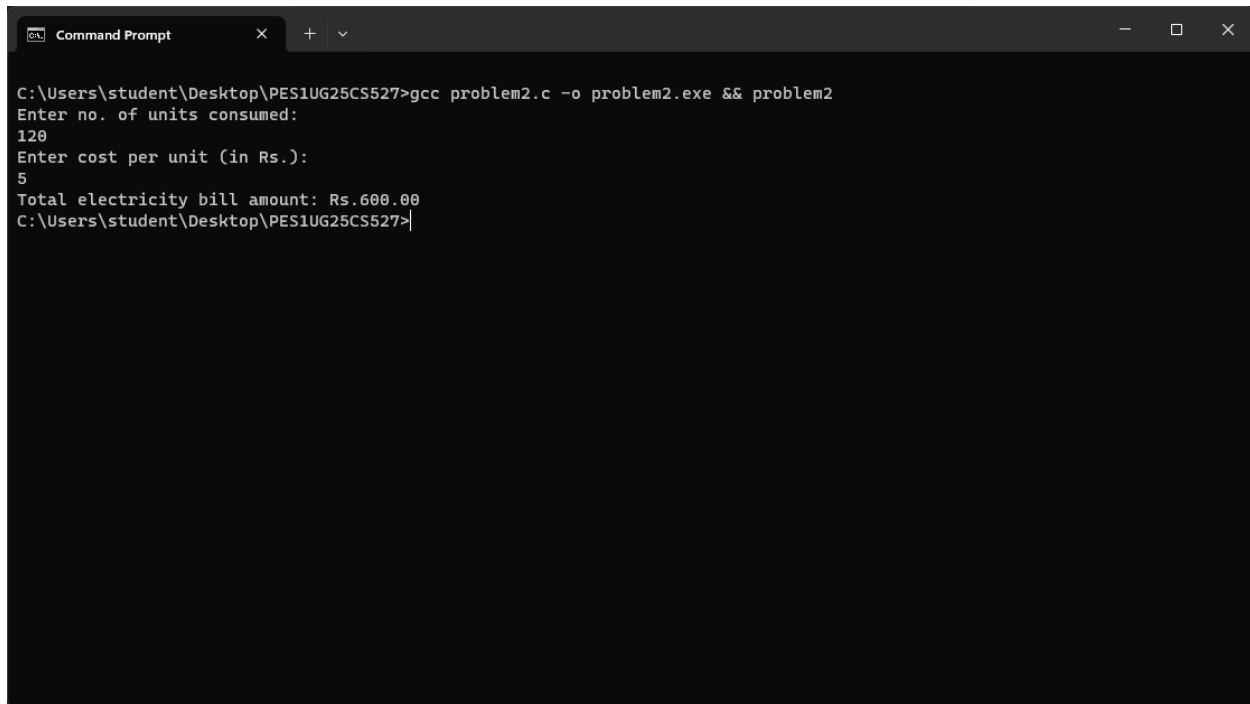
```
Command Prompt
C:\Users\student\Desktop\PES1UG25CS527>gcc problem1.c -o problem1.exe && problem1
Enter the roll number:
40
Enter marks obtained in 5 subjects:
100 90 99 98 95
Total marks:482 Average:96.00
C:\Users\student\Desktop\PES1UG25CS527>
```

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;
}
```



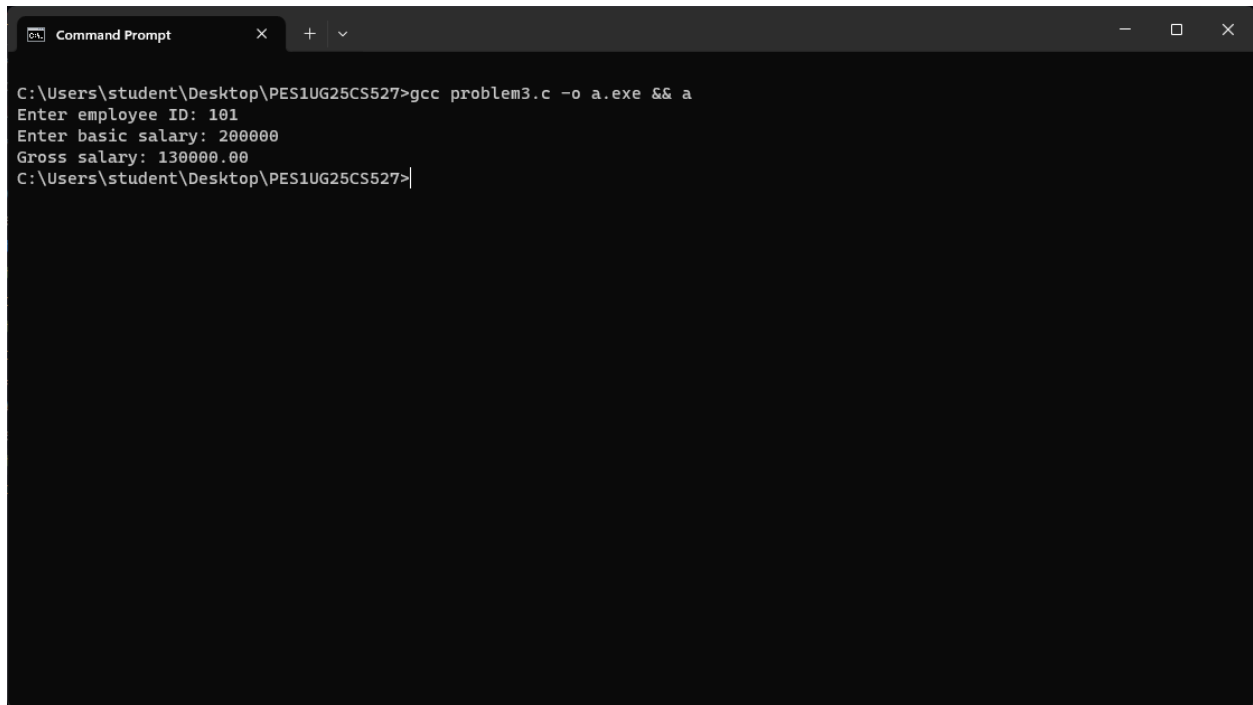
```
Command Prompt
C:\Users\student\Desktop\PES1UG25CS527>gcc problem2.c -o problem2.exe && problem2
Enter no. of units consumed:
120
Enter cost per unit (in Rs.):
5
Total electricity bill amount: Rs.600.00
C:\Users\student\Desktop\PES1UG25CS527>
```

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;

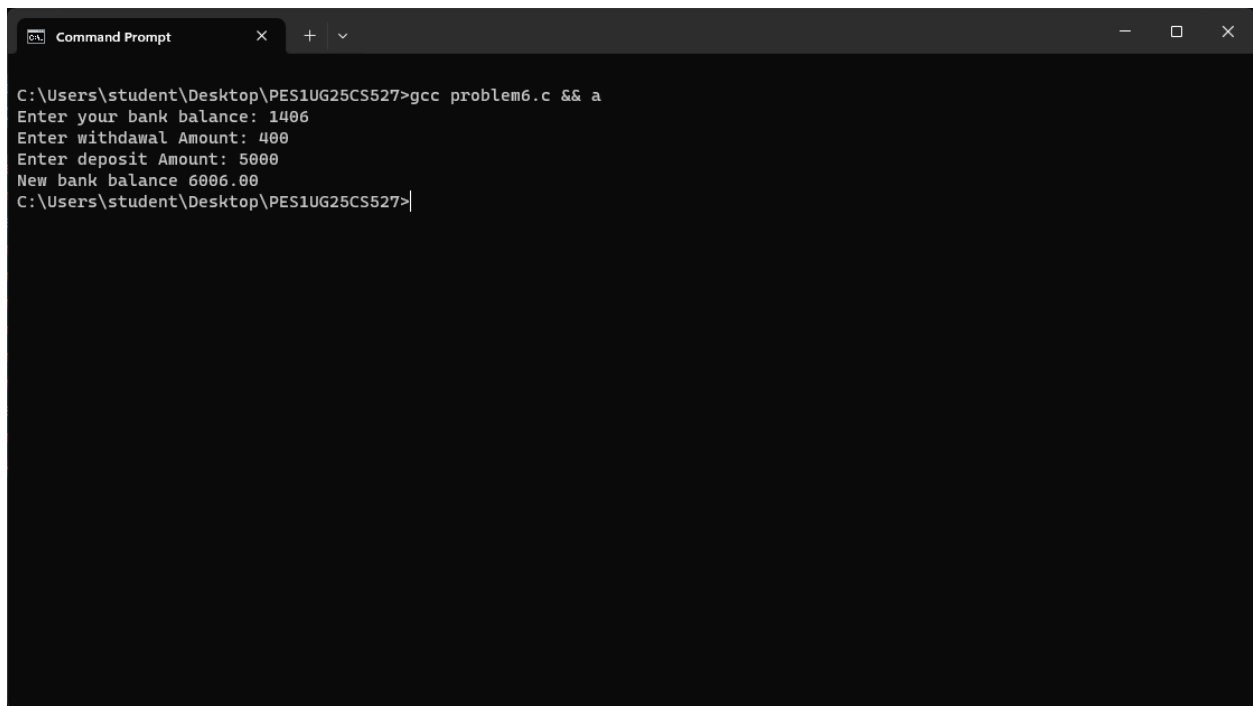
```



```

    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;
}

```



```

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

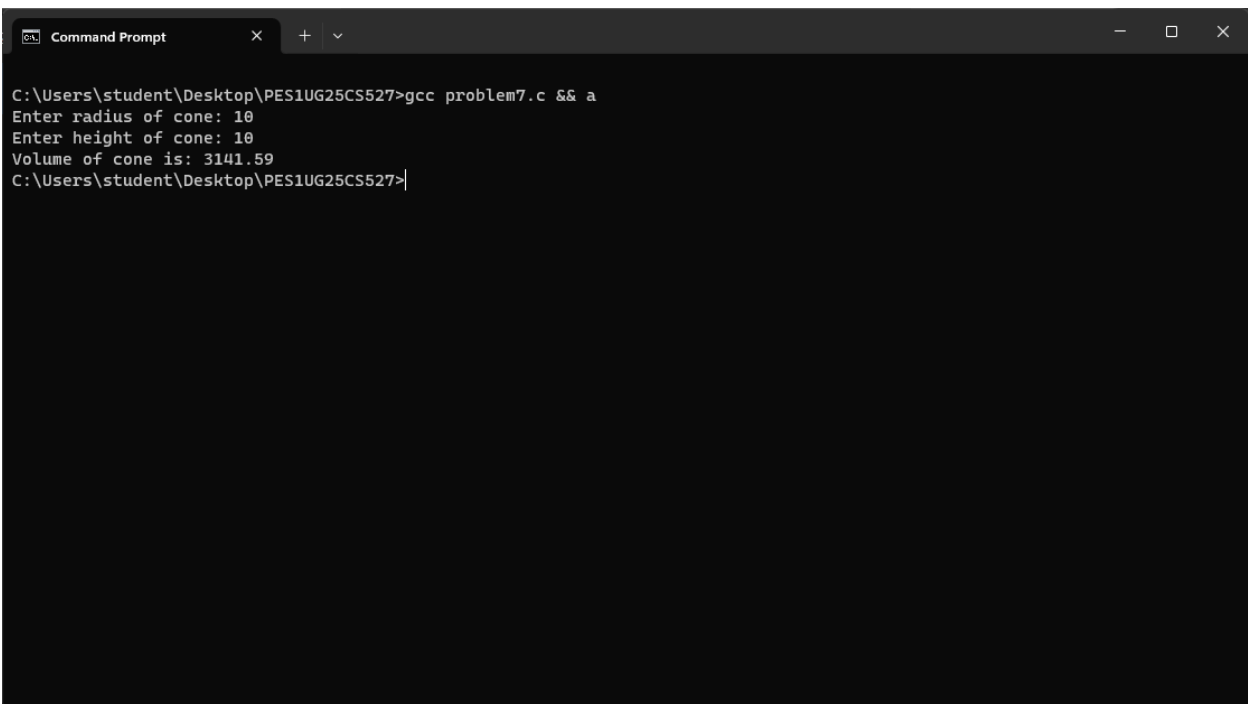
```

/*
 * 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 = pi*r*r*h;
    printf("Volume of cone is: %.2f",vol);
    return 0;
}
```



The screenshot shows a Windows Command Prompt window with the following text:

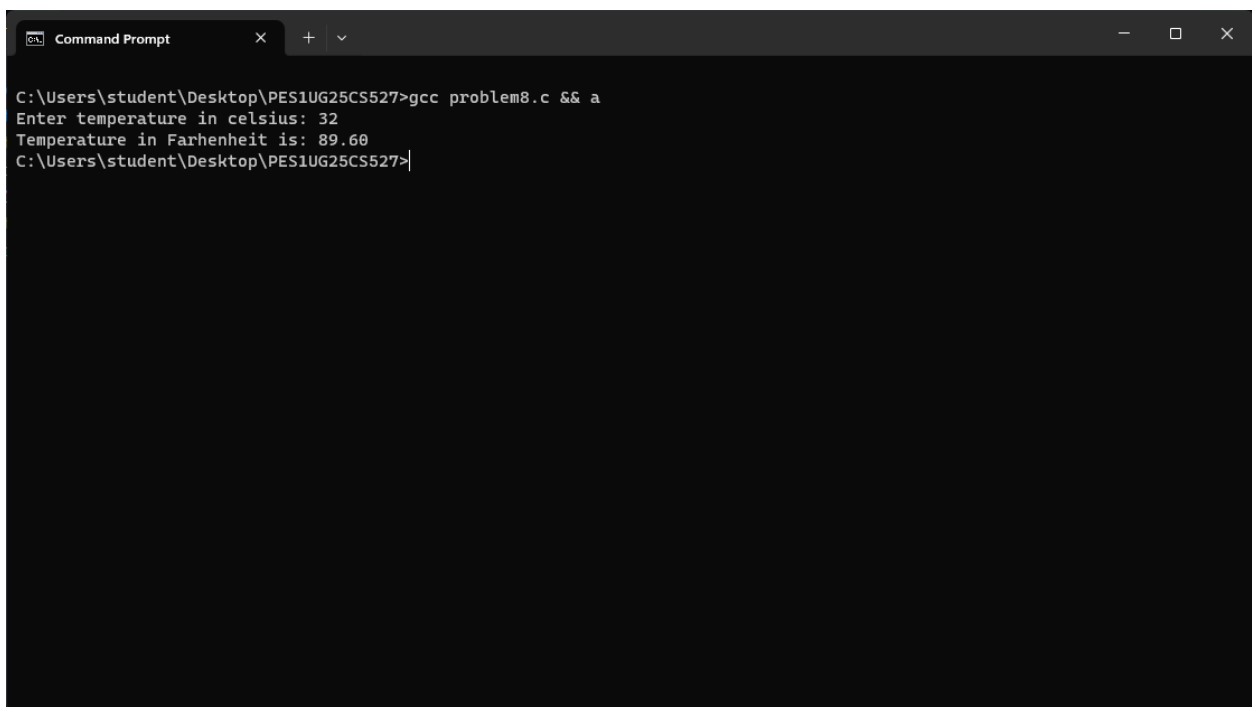
```
C:\Users\student\Desktop\PES1UG25CS527>gcc problem7.c && a
Enter radius of cone: 10
Enter height of cone: 10
Volume of cone is: 3141.59
C:\Users\student\Desktop\PES1UG25CS527>|
```

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 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>
```

The window has a title bar that says "Command Prompt" and standard Windows window controls (minimize, maximize, close). The output shows the program successfully compiled and executed, taking the input "32" and producing the output "89.60".