

Programming for Problem Solving-Lab Practice Answer Script

28.10.2022

Name - Aman Kumar Shaw

Course Name - BCA

Date of Assignment Given - 15.10.2022

Date Code Executed - 22.10.2022

Date of Assignment Submitted - 28.10.2022

Assignment or Program Name - Q6. Write a C program to perform Celsius to Fahrenheit Temperature Conversion.

Code:-

```
#include <stdio.h>

int main()
{
    float cel, fahr;
    printf("Enter the Temperature in Celsius: ");
    scanf("%f", &cel);
    fahr = (cel * 9 / 5) + 32;
    printf("%.1f Celsius = %.1f Fahrenheit", cel, fahr);
    return 0;
}
```

output:-

```
Enter the Temperature in Celsius: 67
67.0 Celsius = 152.6 Fahrenheit
```

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Assignment or Program Name - Q7. Write a C program to perform Fahrenheit to Celsius Temperature Conversion.

Code:-

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

```
int main()  
{  
    float fahr, cel;  
    printf("Enter the Temperature in Fahrenheit: ");  
    scanf("%f", &fahr);  
    cel = (fahr - 32) * 5 / 9 ;  
    printf("%.1f Fahrenheit = %.1f Celsius", fahr, cel);  
    return 0;  
}
```

output:-

```
Enter the Temperature in Fahrenheit: 67  
67.0 Fahrenheit = 19.4 Celsius
```

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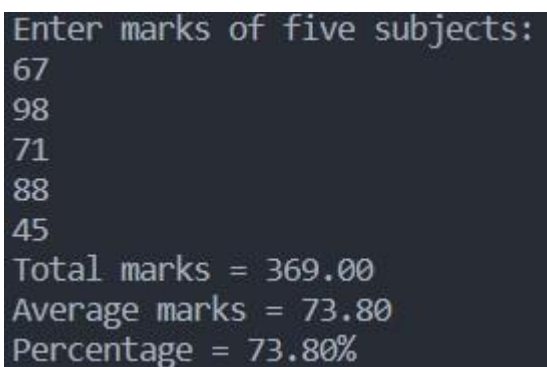
Assignment or Program Name - Q8. Enter Marks of Five Subjects and Calculate Total, Average, Percentage using C programming.

Code:-

```
#include <stdio.h>

int main()
{
    float eng, phy, chem, math, comp;
    float total, avg, percentage;
    printf("Enter marks of five subjects: \n");
    scanf("%f%f%f%f%f", &eng, &phy, &chem, &math, &comp);
    total = (phy + chem + math + comp + eng);
    avg = (phy + chem + math + comp + eng) / 5;
    percentage = total / 500 * 100;
    printf("Total marks = %.2f\n", total);
    printf("Average marks = %.2f\n", avg);
    printf("Percentage = %.2f%%", percentage);
    return 0;
}
```

output:-

A screenshot of a terminal window showing the output of the C program. The text is as follows:

```
Enter marks of five subjects:
67
98
71
88
45
Total marks = 369.00
Average marks = 73.80
Percentage = 73.80%
```

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Assignment or Program Name - Q9. Write a C program to convert Centimeter into Meter and Kilometer.

Code:-

```
#include <stdio.h>

int main()
{
    float cm, meter, km;
    printf("Enter length in centimeter: ");
    scanf("%f", &cm);
    meter = cm / 100;
    km = cm / 100000;
    printf("Length in Meter = %.2f m \n", meter);
    printf("Length in Kilometer = %.2f km", km);
    return 0;
}
```

output:-

```
Enter length in centimeter: 1000
Length in Meter = 10.00 m
Length in Kilometer = 0.01 km
```

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Assignment or Program Name - Q10. Write a C program to Calculate Simple Interest | Principle, Rate of interest & Time.

Code:-

```
#include <stdio.h>

int main()
{
    float principle, interest, time, si;
    printf("Enter Principle Amount: ");
    scanf("%f", &principle);
    printf("Enter Rate of Interest: ");
    scanf("%f", &interest);
    printf("Enter Time in Years: ");
    scanf("%f", &time);
    si = (principle * interest * time) / 100;
    printf("Simple Interest = %.2f", si);
    return 0;
}
```

output:-

```
Enter Principle Amount: 1200
Enter Rate of Interest: 5.4
Enter Time in Years: 2
Simple Interest = 129.60
```