

Programming for Problem Solving-Lab Practice Answer Script

21.10.2022

Name - Aman Kumar Shaw

Course Name - BCA

Date of Assignment Given - 15.10.2022

Date Code Executed - 20.10.2022

Date of Assignment Submitted - 21.10.2022

Assignment or Program Name - Q1. Write a C program to find the Perimeter of a Rectangle by Entering Length and Breadth.

Code:-

```
#include <stdio.h>
int main()
{
    int length, breadth, perimeter;
    printf("Enter the length of the rectangle: ");
    scanf("%d", &length);
    printf("Enter the breadth of the rectangle: ");
    scanf("%d", &breadth);
    perimeter = 2 * (length + breadth);
    printf("The Perimeter of rectangle is %d", perimeter);
    return 0;
}
```

output:-

```
Enter the length of the rectangle: 7
Enter the breadth of the rectangle: 5
The Perimeter of rectangle is 24
```

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Assignment or Program Name - Q2. Write a C program to find the Area of a Rectangle by Entering Length and Breadth.

Code:-

```
#include <stdio.h>

int main()
{
    int length, breadth, area;
    printf("Enter the length of the rectangle: ");
    scanf("%d",&length);
    printf("Enter the breadth of the rectangle: ");
    scanf("%d",&breadth);
    area = length * breadth;
    printf("Area of rectangle is %d",area);
    return 0;
}
```

output:-

```
Enter the length of the rectangle: 7
Enter the breadth of the rectangle: 7
Area of rectangel is 49
```

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Assignment or Program Name - Q3. Write a C program to find the Diameter, Circumference and Area of a Circle.

Code:-

```
#include <stdio.h>

int main ()
{
    float radius, dia, circ, area;
    float pi = 3.14159;
    printf ("Enter the radius of the circle: ");
    scanf ("%f", &radius);
    dia = 2 * radius;
    circ = 2 * pi * radius;
    area = pi * radius * radius;
    printf ("Diameter of Circle is %.2f\n", dia);
    printf ("Circumference of Circle is %.2f\n", circ);
    printf ("Area of Circle is %.2f\n", area);
    return 0;
}
```

output:-

```
Enter the radius of the circle: 6.3
Diameter of Circle is 12.60
Circumference of Circle is 39.58
Area of Circle is 124.69
```

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Assignment or Program Name - Q4. Write a C program to find the Third Angle of a Triangle by Entering Two Angles.

Code:-

```
#include <stdio.h>

int main ()
{
    float ang1, ang2, ang3;
    printf ("Enter Angle 1: ");
    scanf ("%f", &ang1);
    printf ("Enter Angle 2: ");
    scanf ("%f", &ang2);
    ang3 = 180 - (ang1 + ang2);
    printf ("Third Angle of a Triangle is %.1f", ang3);
    return 0;
}
```

output:-

```
Enter Angle 1: 60
Enter Angle 2: 30
Third Angle of a Triangle is 90.0
```

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Assignment or Program Name - Q5. Write a C program to find the Area of the Triangle by Entering Height, and Base.

Code:-

```
#include <stdio.h>

int main ()
{
    float height, base, area;
    printf ("Enter the height of triangle: ");
    scanf ("%f", &height);
    printf ("Enter the base of triangle: ");
    scanf ("%f", &base);
    area = (height * base) / 2;
    printf ("Area of the Triangle is %.2f", area);
    return 0;
}
```

output:-

```
Enter the height of triangle: 7.5
Enter the base of triangle: 5.5
Area of the Triangle is 20.62
```