

Lab 1

(Sequence)

Q1\ Square area

```
1  #include <stdio.h>
2  void main(void)
3  {
4      float side;
5      float area;
6      printf("Enter Square side length: ");
7      scanf("%f",&side);
8      area=side*side;
9      printf("Area of Square with side length[%.2f]= %.2f",side,area);
10 }
11
12
```

Run

```
Enter Square side length: 5
Area of Square with side length[5.00]= 25.00
```

Q3\ Circle area

```
1  #include <stdio.h>
2  #define PI 3.14
3  void main(void)
4  {
5      float radius;
6      float area;
7      printf("Enter Circle Radius: ");
8      scanf("%f",&radius);
9      area=PI*radius*radius;
10     printf("Area of Circle with Radius[%.2f]= %.2f",radius,area);
11 }
12
```

Run

```
Enter Circle Radius: 10
Area of Circle with Radius[10.00]= 314.00
```

Q8\ Fewest number of coins (1,5,10,25,50)

```
1  #include <stdio.h>
2  //Fewest number of coins (1,5,10,25,50)
3  void main(void)
4  {
5      int amount;
6      int numCoins = 0;
7
8      printf("Enter the amount of money to be paid: ");
9      scanf("%d",&amount);
10
11     // Calculate the number of 50 coins required
12     numCoins = numCoins + (amount/50);
13     amount = amount%50;
14     // Calculate the number of 25 coins required
15     numCoins = numCoins + (amount/25);
16     amount = amount%25;
17     // Calculate the number of 10 coins required
18     numCoins = numCoins + (amount/10);
19     amount = amount%10;
20     // Calculate the number of 5 coins required
21     numCoins = numCoins + (amount/5);
22     amount = amount%5;
23     // Calculate the number of 1 coins required
24     numCoins = numCoins + amount;
25     printf("The fewest number of coins required: %d\n", numCoins);
26
27 }
28
```

Run (141 = 50+50+25+10+5+1 total 6 coins)

```
Enter the amount of money to be paid: 141
The fewest number of coins required: 6
```