

Q1)

1.

```
1  #include <stdio.h>
2
3  int main() {
4
5      int input;
6
7      printf("Enter the number \n");
8      scanf("%d", &input);
9
10     printf("%d", input);
11
12     return 0;
13 }
```

```
C:\himanshu\assignment_3>gcc q1_1.c -o q1_1.exe
C:\himanshu\assignment_3>q1_1.exe
Enter the number
59
59
```

2.

```
1  #include <stdio.h>
2
3  int main() {
4      float input;
5
6      printf("Enter the float number \n");
7      scanf("%f", &input);
8      printf("%.4f", input);
9
10     return 0;
11 }
```

```
C:\himanshu\assignment_3>gcc q1_2.c -o q1_2.exe
C:\himanshu\assignment_3>q1_2.exe
Enter the float number
3.5678456
3.5678
```

3.

```
1  #include <stdio.h>
2
3  int main() {
4      float input;
5
6      printf("Enter the float number \n");
7      scanf("%f", &input);
8      printf("%.2f", input);
9
10     return 0;
11 }
```

```
C:\himanshu\assignment_3>gcc q1_3.c -o q1_3.exe
C:\himanshu\assignment_3>q1_3.exe
Enter the float number
5.3267
5.33
```

4.

```

1  #include <stdio.h>
2
3  int main() {
4      float input;
5
6      printf("Enter the float number \n");
7      scanf("%f", &input);
8      printf("%.2f", input);
9
10     return 0;
11 }

```

```
C:\himanshu\assignment_3>gcc q1_4.c -o q1_4.exe
```

```

C:\himanshu\assignment_3>q1_4.exe
Enter the float number
5664.57567456
5664.58

```

5.

```

1  #include <stdio.h>
2
3  int main() {
4      int input;
5
6      printf("Enter the number \n");
7      scanf("%d", &input);
8      printf("%d * %d", input,input);
9
10     return 0;
11 }

```

```
C:\himanshu\assignment_3>gcc q1_5.c -o q1_5.exe
```

```

C:\himanshu\assignment_3>q1_5.exe
Enter the number
35345364
35345364 * 35345364

```

6.

```

1  #include <stdio.h>
2
3  int main() {
4      char str[100];
5
6      printf("Enter your name \n");
7      gets(str);
8      printf("%s", str);
9
10
11     return 0;
12 }

```

```
C:\himanshu\assignment_3>gcc q1_6.c -o q1_6.exe
```

```

C:\himanshu\assignment_3>q1_6.exe
Enter your name
himanshu kumare
himanshu kumare

```

7.

```

1  #include <stdio.h>
2
3  int main() {
4      char str[100];
5
6      printf("Enter your institute name \n");
7      gets(str);
8      printf("%s", str);
9
10
11     return 0;
12 }

```

```
C:\himanshu\assignment_3>gcc q1_7.c -o q1_7.exe

C:\himanshu\assignment_3>q1_7.exe
Enter your institute name
S. V. National Institute of Technology, Surat
S. V. National Institute of Technology, Surat
```

Q2)

```
1  #include <stdio.h>
2
3  int main() {
4
5      float PI = 3.14, radius;
6      printf("Enter the radius \n");
7      scanf("%f", &radius);
8
9      float diameter, area, circum;
10
11     diameter = 2 * radius;
12     area = PI * radius * radius;
13     circum = 2 * PI * radius;
14
15     printf("Diameter : %0.3f \nArea : %0.3f \nCircumference : %0.3f \n", diameter,area,circum);
16
17     return 0;
18 }
```

```
C:\himanshu\assignment_3>gcc q2.c -o q2.exe

C:\himanshu\assignment_3>q2.exe
Enter the radius
7
Diameter : 14.000
Area : 153.860
Circumference : 43.960
```

Q3)

```
1  #include <stdio.h>
2
3  int main() {
4
5      int marks[5];
6      int x=0;
7      printf("Enter the marks obtained in Maths : ");
8      scanf("%d", &marks[x++]);
9      printf("\nEnter the marks obtained in Physics : ");
10     scanf("%d", &marks[x++]);
11     printf("\nEnter the marks obtained in Chemistry : ");
12     scanf("%d", &marks[x++]);
13     printf("\nEnter the marks obtained in English : ");
14     scanf("%d", &marks[x++]);
15     printf("\nEnter the marks obtained in Computer : ");
16     scanf("%d", &marks[x++]);
17
18     int total_marks = 0;
19
20     for(int i=0; i<5; i++) {
21         if(marks[i] < 35) {
22             printf("Sorry you've failed in the exam");
23             return 0;
24         }
25         total_marks += marks[i];
26     }
27
28     float percent = total_marks/5;
29
30     printf("Total marks obtained : %d \n", total_marks);
31     printf("Percentage obtained : %0.2f\n", percent);
32
33
34     return 0;
35 }
```

```

C:\himanshu\assignment_3>gcc q3.c -o q3.exe

C:\himanshu\assignment_3>q3.exe
Enter the marks obtained in Maths : 70

Enter the marks obtained in Physics : 80

Enter the marks obtained in Chemistry : 84

Enter the marks obtained in English : 96

Enter the marks obtained in Computer : 99
Total marks obtained : 429
Percentage obtained : 85.00

```

Q4)

```

1  #include <stdio.h>
2
3  int main() {
4
5      printf("Enter the fahrenheit temperature : ");
6      float f;
7      scanf("%f", &f);
8
9      float c =(f-32) * (0.5555);
10
11     printf("\nTemperature in celsius is %.2f", c);
12     return 0;
13 }

```

```

C:\himanshu\assignment_3>gcc q4.c -o q4.exe

C:\himanshu\assignment_3>q4.exe
Enter the fahrenheit temperature : 100

Temperature in celsius is 37.77

```

Q5)

1.

```

1  #include <stdio.h>
2
3  int main() {
4      int a,b,c;
5
6      printf("Enter the value of a : ");
7      scanf("%d", &a);
8      printf("\nEnter the value of b : ");
9      scanf("%d", &b);
10
11     float sum;
12
13     sum = a*a + 2*a*b + b*b;
14
15     printf("%.3f", sum);
16 }

```

```

C:\himanshu\assignment_3>gcc q5_1.c -o q5_1.exe

C:\himanshu\assignment_3>q5_1.exe
Enter the value of a : 2

Enter the value of b : 3
25.000

```

2.

```

1  #include <stdio.h>
2
3  int main() {
4      int a,b,c;
5
6      printf("Enter the value of a : ");
7      scanf("%d", &a);
8      printf("\nEnter the value of b : ");
9      scanf("%d", &b);
10
11     float sum;
12
13     sum = a*a - 2*a*b + b*b;
14
15     printf("%.3f", sum);
16 }

```

C:\himanshu\assignment_3>gcc q5_2.c -o q5_2.exe

C:\himanshu\assignment_3>q5_2.exe

Enter the value of a : 3

Enter the value of b : 5

4.000

3.

```

1  #include <stdio.h>
2
3  int main() {
4      int a,b,c;
5
6      printf("Enter the value of a : ");
7      scanf("%d", &a);
8      printf("\nEnter the value of b : ");
9      scanf("%d", &b);
10     printf("\nEnter the value of c : ");
11     scanf("%d", &c);
12
13     float sum;
14
15     sum = a*a*a + c*c*c + b*b*b - 3*a*b*c;
16
17     printf("%.3f", sum);
18 }

```

C:\himanshu\assignment_3>gcc q5_3.c -o q5_3.exe

C:\himanshu\assignment_3>q5_3.exe

Enter the value of a : 4

Enter the value of b : 5

Enter the value of c : 6

45.000