Q.1) Write a c program to accept an integer using pointer and check whether it is even or odd.

```
#include <stdio.h>
int main()
 {
    int number;
    int *ptr = &number;
    printf("Enter an integer: ");
    scanf("%d", ptr);
    // Checking whether the number is even or odd
    if (*ptr % 2 == 0)
   {
        printf("The number %d is even.\n", *ptr);
    }
   else
   {
        printf("The number %d is odd.\n", *ptr);
    }
    return 0;
}
```

Q.2) Write a c program to find maximum from two integers using pointers.

```
#include <stdio.h>
int main()
{
    int num1, num2;
    int *ptr1 = &num1;
    int *ptr2 = &num2;
    printf("Enter the first integer: ");
    scanf("%d", ptr1);
    printf("Enter the second integer: ");
    scanf("%d", ptr2);
    if (*ptr1 > *ptr2)
     {
        printf("The maximum number is: %d\n", *ptr1);
    }
     else if (*ptr1 < *ptr2)
    {
        printf("The maximum number is: %d\n", *ptr2);
    }
    else
  {
        printf("Both numbers are equal: %d\n", *ptr1);
    }
 return 0;
}
```

Q.3) Write a c program to read two integers using pointers and perform all arithmetic operations on them.

```
#include <stdio.h>
int main()
 {
   int num1, num2;
   int *ptr1 = &num1;
   int *ptr2 = &num2;
   printf("Enter the first integer: ");
   scanf("%d", ptr1);
   printf("Enter the second integer: ");
   scanf("%d", ptr2);
   printf("Addition: %d + %d = %d\n", *ptr1, *ptr2, *ptr1 + *ptr2);
   printf("Subtraction: %d - %d = %d\n", *ptr1, *ptr2, *ptr1 - *ptr2);
   printf("Multiplication: %d * %d = %d\n", *ptr1, *ptr2, (*ptr1)*( *ptr2));
   if (*ptr2 != 0)
  {
      printf("Division: %d / %d = %.2f\n", *ptr1, *ptr2, (float)(*ptr1) / *ptr2);
      printf("Modulus: %d %% %d = %d\n", *ptr1, *ptr2, *ptr1 % *ptr2);
   }
  else
 {
      printf("Division and modulus by zero are not defined.\n");
   }
  return 0;
}
```

Q.4) Write a c program to interchange value of two variables using pointer.

```
#include <stdio.h>
int main()
{
   int n1, n2;
   int *p1 = &n1;
   int *p2 = &n2;
   printf("Enter the first integer: ");
   scanf("%d", p1);
   printf("Enter the second integer: ");
   scanf("%d", p2);
   int temp = *p1;
   *p1 = *p2;
   *p2 = temp;
   printf("After interchanging:\n");
   printf("First integer: %d\n", *p1);
   printf("Second integer: %d\n", *p2);
   return 0;
}
```

Q.5) Write a c program to sum of first ‘n’ numbers using pointers.

```
#include <stdio.h>
int main()
 {
   int n, sum = 0;
```

```
    int *p= &n;
    printf("Enter the value of n: ");
    scanf("%d", p);
    for (int i = 1; i <= *p; i++)
   {
       sum =sum+i;
    }
    printf("The sum of the first %d numbers is: %d\n", *p, sum);
    return 0;
}
```

Q.6) Write a c program to accept radius and display area and perimeter of circle using pointer.

```
#include <stdio.h>
#define PI 3.14159
int main()
{
float radius;
float *ptr_radius = &radius;
 float area, perimeter;
float *ptr_area = &area;
float *ptr_perimeter = &perimeter;
 printf("Enter the radius of the circle: ");
scanf("%f", ptr_radius);
*ptr_area = PI * (*ptr_radius) * (*ptr_radius);
*ptr_perimeter = 2 * PI * (*ptr_radius);
printf("Area of the circle: %.2f\n", *ptr_area);
printf("Perimeter of the circle: %.2f\n", *ptr_perimeter);
return 0;
}
```

Q.7) Write a c program to sum of ‘n’ numbers using pointers.

```
#include <stdio.h>
int main()
{
    int n;
    int sum = 0;
    int *ptr;
    printf("Enter the number of elements: ");
    scanf("%d", &n);
    int numbers[n];
    printf("Enter %d numbers:\n", n);
    for (int i = 0; i < n; i++)
   {
       scanf("%d", &numbers[i]);
    }
    ptr = numbers;
    for (int i = 0; i < n; i++)
   {
       sum += *(ptr + i);
    }
```

```
    printf("The sum of the numbers is: %d\n", sum);
    return 0;
}
```