Answer 1

```c
#include <stdio.h>

int main() {
    int n, sum = 0;

    printf("Input number of terms: ");
    scanf("%d", &n);

    printf("The odd numbers are: \n");
    for (int i = 1; i <= n; i++) {
        int oddNumber = 2 * i - 1;
        printf("%d ", oddNumber);
        sum += oddNumber;
    }

    printf("The Sum of odd Natural Numbers up to %d terms: %d\n", n, sum);

    return 0;
}
```

Answer 2

```c
#include <stdio.h>

int main() {
    int n, num = 1;


    for (int i = 1; i <= 4; i++) {

        for (int space = 1; space <= 4 - i; space++) {
            printf("  ");
        }


        for (int j = 1; j <= i; j++) {
            printf("%2d ", num);
            num++;
        }

        printf("\n");
    }

    return 0;
```

Answer 3

```c
#include <stdio.h>

int decimalToOctal(int decimalNum) {
    int octalNum = 0, placeValue = 1;

    while (decimalNum > 0) {
        int remainder = decimalNum % 8;
        octalNum += remainder * placeValue;
        decimalNum /= 8;
        placeValue *= 10;
    }

    return octalNum;
}

int main() {
    int decimalNum, octalNum;

    printf("Enter a number to convert: ");
    scanf("%d", &decimalNum);

    if (decimalNum < 0) {
        printf("Please enter a non-negative number.\n");
        return 1;
    }

    octalNum = decimalToOctal(decimalNum);

    printf("The Octal of %d is %d.\n", decimalNum, octalNum);

    return 0;
}
```

Answer 4

```c
#include <stdio.h>

int main() {
    int customerID, unitConsumed;
    char customerName[50];


    printf("Enter Customer ID: ");
    scanf("%d", &customerID);
    printf("Enter Customer Name: ");
    scanf(" %[^\n]", customerName);
    printf("Enter Units Consumed: ");
    scanf("%d", &unitConsumed);

    float chargePerUnit, totalAmount, surcharge = 0.0;

    if (unitConsumed <= 199)
        chargePerUnit = 1.20;
    else if (unitConsumed >= 200 && unitConsumed < 400)
        chargePerUnit = 1.50;
    else if (unitConsumed >= 400 && unitConsumed < 600)
        chargePerUnit = 1.80;
    else
        chargePerUnit = 2.00;

    totalAmount = unitConsumed * chargePerUnit;

    if (totalAmount > 400)
        surcharge = totalAmount * 0.15;

    if (totalAmount + surcharge < 100)
        totalAmount = 100;
    else
        totalAmount += surcharge;

    printf("\nCustomer IDNO: %d\n", customerID);
    printf("Customer Name: %s\n", customerName);
    printf("Unit Consumed: %d\n", unitConsumed);
    printf("Amount Charges @ Rs. %.2f per unit: %.2f\n", chargePerUnit,
unitConsumed * chargePerUnit);
    printf("Surcharge Amount: %.2f\n", surcharge);
    printf("Net Amount Paid By the Customer: %.2f\n", totalAmount);

    return 0;
}
```

Answer 5

```c
#include <stdio.h>

int main() {
    float angle1, angle2, angle3;

    // Input two angles of the triangle separated by a comma
    printf("Input two angles of the triangle separated by a comma: ");
    scanf("%f,%f", &angle1, &angle2);

    // Calculate the third angle
    angle3 = 180 - angle1 - angle2;

    // Print the third angle
    printf("Third angle of the triangle: %.2f\n", angle3);

    return 0;
}
```

Answer 6

```c
#include <stdio.h>

int main() {
    int firstTerm, numItems, commonDiff;

    printf("Input the starting number of the A.P. series: ");
    scanf("%d", &firstTerm);
    printf("Input the number of items for the A.P. series: ");
    scanf("%d", &numItems);
    printf("Input the common difference of A.P. series: ");
    scanf("%d", &commonDiff);

    int sum = 0;
    int term = firstTerm;

    for (int i = 0; i < numItems; i++) {
        sum += term;
        term += commonDiff;
    }

    printf("The Sum of the A.P. series is:\n");
    for (int i = 0; i < numItems - 1; i++) {
        printf("%d + ", firstTerm + i * commonDiff);
    }
```

```c
    printf("%d = %d\n", firstTerm + (numItems - 1) * commonDiff, sum);

    return 0;
}
```

Answer 7

```c
#include <stdio.h>

int main() {
    int n = 9;
    int i, j, space;

    for (i = 1; i <= n; i += 2) {

        for (space = 1; space <= (n - i) / 2; space++) {
            printf(" ");
        }

        for (j = 1; j <= i; j++) {
            printf("*");
        }

        printf("\n");
    }

    for (i = n - 2; i >= 1; i -= 2) {

        for (space = 1; space <= (n - i) / 2; space++) {
            printf(" ");
        }

        for (j = 1; j <= i; j++) {
            printf("*");
        }

        printf("\n");
    }

    return 0;
}
```