

Program 1: Sum of the First 'n' Natural Numbers

```
#include <stdio.h>
#include <conio.h>

void main() {
    int n, sum = 0, i;
    clrscr();

    printf("Enter a number: ");
    scanf("%d", &n);

    for (i = 1; i <= n; i++)
    {
        sum += i;
    }

    printf("Sum of first %d natural numbers is %d\n",
n, sum);

    getch();
}
```

Program 2: Sum and Average of 10 Numbers

```
#include <stdio.h>
#include <conio.h>

void main() {
    int i, num, sum = 0;
    float avg;
    clrscr();

    printf("Enter 10 numbers:\n");
    for (i = 1; i <= 10; i++) {
        scanf("%d", &num);
        sum += num;
    }

    avg = sum / 10.0;
    printf("Sum = %d\n", sum);
    printf("Average = %.2f\n", avg);

    getch();
}
```

Program 3: Cube of Numbers up to a Given Integer

```
#include <stdio.h>
#include <conio.h>

void main() {
    int i, n;
    clrscr();

    printf("Enter an integer: ");
    scanf("%d", &n);

    for (i = 1; i <= n; i++) {
        printf("Number is: %d and cube of the %d is:
%d\n", i, i, (i * i * i));
    }

    getch();
}
```

Program 4: Count the Number of Digits in an Integer

```
#include <stdio.h>
#include <conio.h>

void main() {
    int num, count = 0;
    clrscr();

    printf("Enter an integer: ");
    scanf("%d", &num);

    while (num != 0) {
        num = num / 10;
        count++;
    }

    printf("Number of digits: %d\n", count);
    getch();
}
```

Program 5: Reverse of a Number

```
#include <stdio.h>
#include <conio.h>

void main() {
    int num, reversed = 0, remainder;
    clrscr();

    printf("Enter a number: ");
    scanf("%d", &num);

    while (num != 0) {
        remainder = num % 10;
        reversed = reversed * 10 + remainder;
        num = num / 10;
    }

    printf("Reversed number: %d\n", reversed);
    getch();
}
```

Program 6: Palindrome Check

```
#include <stdio.h>
#include <conio.h>

void main() {
    int num, original, reversed = 0, remainder;
    clrscr();

    printf("Enter a number: ");
    scanf("%d", &num);

    original = num;

    while (num != 0) {
        remainder = num % 10;
        reversed = reversed * 10 + remainder;
        num = num / 10;
    }

    if (original == reversed) {
        printf("%d is a palindrome.\n", original);
    } else {
        printf("%d is not a palindrome.\n",
original);
    }

    getch();
}
```

Program 7: Factorial of a Number

```
#include <stdio.h>
#include <conio.h>

void main() {
    int i, n, fact = 1;
    clrscr();

    printf("Enter a number: ");
    scanf("%d", &n);

    for (i = 1; i <= n; i++) {
        fact = fact * i;
    }

    printf("Factorial of %d is %d\n", n, fact);

    getch();
}
```

Program 8: Fibonacci Series

```
#include <stdio.h>
#include <conio.h>

void main() {
    int n, t1 = 0, t2 = 1, nextTerm, i;
    clrscr();

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

    printf("Fibonacci Series: %d %d", t1, t2);

    for (i = 3; i <= n; i++) {
        nextTerm = t1 + t2;
        printf(" %d", nextTerm);
        t1 = t2;
        t2 = nextTerm;
    }

    getch();
}
```

Program 9: Armstrong Number Check

```
#include <stdio.h>
#include <conio.h>

void main() {
    int num, original, remainder, result = 0;
    clrscr();

    printf("Enter a three-digit number: ");
    scanf("%d", &num);

    original = num;

    while (original != 0) {
        remainder = original % 10;
        result += remainder * remainder * remainder;
        original = original / 10;
    }

    if (result == num) {
        printf("%d is an Armstrong number.\n", num);
    } else {
        printf("%d is not an Armstrong number.\n",
num);
    }

    getch();
}
```

Program 10: Factors of a Given Number

```
#include <stdio.h>
#include <conio.h>

void main() {
    int i, num;
    clrscr();

    printf("Enter a number: ");
    scanf("%d", &num);

    printf("Factors of %d are: ", num);

    for (i = 1; i <= num; i++) {
        if (num % i == 0) {
            printf("%d ", i);
        }
    }

    getch();
}
```