

// Q1 - Print numbers from 1 to 10.

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

```
int main() {  
    for(int i = 1; i <= 10; i++) {  
        printf("%d\n", i);  
    }  
}
```

// Q2 - Print table for the given number.

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

```
int main() {  
    int a, i = 1;  
    printf("Enter a number: ");  
    scanf("%d", &a);  
  
    while (i <= 10) {  
        printf("%d\n", a * i);  
        i++;  
    }  
}
```

// Q3 - Calculate sum of numbers in the given range.

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

```
int main() {  
    int start, end, sum = 0;  
  
    printf("Enter the starting number: ");  
    scanf("%d", &start);
```

```
printf("Enter the ending number: ");  
scanf("%d", &end);
```

```
if (start > end) {  
    return 1;  
}
```

```
for(int i = start; i <= end; i++) {  
    sum += i;  
}
```

```
printf("Total sum is: %d", sum);  
}
```

// Q4 - Check if a number is prime.

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

```
int main() {  
    int num, isprime = 1;
```

```
printf("Enter the number to check prime or not: ");  
scanf("%d", &num);
```

```
if (num <= 1) {  
    printf("Not prime");  
    return 0;  
}
```

```
for(int i = 2; i <= num / 2; i++) {  
    if (num % i == 0) {  
        isprime = 0;  
        break;
```

```

    }
}

if (isprime) {
    printf("Prime");
} else {
    printf("Not prime");
}
}

// Q5 - Check if a number is Armstrong.
#include<stdio.h>

int main() {
    int num, originalNum, sum = 0, digit, count = 0, temp;

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

    originalNum = num;
    temp = num;

    while(temp > 0) {
        temp /= 10;
        count++;
    }

    temp = num;

    while (temp > 0) {
        digit = temp % 10;
        int power = 1;

```

```

        for (int i = 0; i < count; i++) {
            power *= digit;
        }
        sum += power;
        temp /= 10;
    }

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

```

// Q6 - Check if a number is perfect.

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

```

int main() {
    int num, fact = 0;

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

    for(int i = 1; i < num; i++) {
        if(num % i == 0) {
            fact += i;
        }
    }

    if(num == fact)
        printf("%d is a perfect number", num);
    else
        printf("%d is not a perfect number", num);
}

```

```
}
```

```
// Q7 - Find factorial of a number.
```

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

```
int main() {
```

```
    int num, fact = 1;
```

```
    printf("Enter a number: ");
```

```
    scanf("%d", &num);
```

```
    for(int i = 1; i <= num; i++) {
```

```
        fact *= i;
```

```
    }
```

```
    printf("Factorial of %d is: %d", num, fact);
```

```
}
```

```
// Q8 - Check if a number is strong.
```

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

```
int main() {
```

```
    int num, originalNum, digit, sum = 0;
```

```
    printf("Enter a number: ");
```

```
    scanf("%d", &num);
```

```
    originalNum = num;
```

```
    while (num > 0) {
```

```
        digit = num % 10;
```

```
        int fact = 1;
```

```
        for (int i = 1; i <= digit; i++) {
            fact *= i;
        }

        sum += fact;
        num /= 10;
    }

    if (sum == originalNum)
        printf("%d is a Strong Number.\n", originalNum);
    else
        printf("%d is not a Strong Number.\n", originalNum);
}
```

// Q9 - Check if a number is palindrome.

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

```
int main() {
    int num, originalNum, reversedNum = 0, digit;

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

    originalNum = num;

    while (num > 0) {
        digit = num % 10;
        reversedNum = reversedNum * 10 + digit;
        num /= 10;
    }
```

```
    if (originalNum == reversedNum)
        printf("%d is a Palindrome.\n", originalNum);
    else
        printf("%d is Not a Palindrome.\n", originalNum);
}
```

// Q10 - Add the first and last digit of a number.

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

```
int main() {
    int num, firstDigit, lastDigit;

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

    lastDigit = num % 10;
    firstDigit = num;

    while (firstDigit >= 10) {
        firstDigit /= 10;
    }

    printf("Sum of first and last digit: %d\n", firstDigit + lastDigit);
}
```