

// Q1 - Print Armstrong numbers in the given range 1 to n.

#include <stdio.h>

int main() {

int start = 11, range, num, temp, count, result, digit;

printf("Enter range for the Armstrong number: ");

scanf("%d", &range);

for (num = start; num <= range; num++) {

temp = num;

count = 0;

result = 0;

while (temp > 0) {

count++;

temp /= 10;

}

temp = num;

while (temp > 0) {

digit = temp % 10;

int power = 1;

for (int j = 1; j <= count; j++)

power *= digit;

result += power;

temp /= 10;

}

```
        if (num == result) {  
            printf("%d ", num);  
        }  
    }  
}
```

// Q2 - Print prime numbers in the given range 1 to n.

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

```
int main(){  
    int range , isprime;  
  
    printf("Enter range for the prime number: ");  
    scanf("%d", &range);  
  
    for(int num = 2; num <= range; num++){  
        isprime = 1;  
        for(int i = 2; i < num; i++){  
            if(num % i == 0){  
                isprime = 0;  
                break;  
            }  
        }  
        if(isprime)  
            printf("%d ", num);  
    }  
}
```

// Q3 - Check perfect numbers in the given range 1 to n.

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

```
int main(){
```

```

int range , fact = 0, num;

printf("Enter range for the perfect number: ");
scanf("%d", &range);

for(num = 1; num <= range; num++){
    fact = 0;
    for(int i = 1; i <= num / 2; i++){
        if(num % i == 0){
            fact += i;
        }
    }
    if(fact == num)
        printf("%d ", num);
}

// Q4 - Check strong numbers in the given range 1 to n.
#include<stdio.h>

int main(){
    int range, fact, num, temp, digit, sum;

    printf("Enter range for the strong number: ");
    scanf("%d", &range);

    for(num = 1; num <= range; num++){
        sum = 0;
        temp = num;

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

```

```

    fact = 1;

    for(int i = 1; i <= digit; i++){
        fact *= i;
    }
    sum += fact;
    temp /= 10;
}
if(sum == num)
    printf("%d ", num);
}
}

```

// Q5 - Print Fibonacci series.

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

```

int main(){
    int n = 10 , num , prev = 0, next = 1, temp;

    for(num = 0; num <= n; num++){
        printf("%d ", prev);
        temp = prev + next;
        prev = next;
        next = temp;
    }
}

```