// Program 1

#include <stdio.h>

float toCelsius(float f) {

return (f - 32) \* 5 / 9;

}

int main() {

printf("%.2f\n", toCelsius(98.6));

return 0;

}

// Program 2

#include <stdio.h>

int isLeap(int y) {

if((y % 4 == 0 && y % 100 != 0) || (y % 400 == 0)) return 1;

return 0;

}

int main() {

printf("%d\n", isLeap(2024));

return 0;

}

// Program 3

#include <stdio.h>

int reverse(int n) {

int r = 0;

while(n > 0) {

r = r \* 10 + n % 10;

n /= 10;

}

return r;

}

int main() {

printf("%d\n", reverse(1234));

return 0;

}

// Program 4

#include <stdio.h>

int countDigits(int n) {

int c = 0;

while(n != 0) {

c++;

n /= 10;

}

return c;

}

int main() {

printf("%d\n", countDigits(12345));

return 0;

}

// Program 5

#include <stdio.h>

int sumDigits(int n) {

int sum = 0;

while(n > 0) {

sum += n % 10;

n /= 10;

}

return sum;

}

int main() {

printf("%d\n", sumDigits(123));

return 0;

}

// Program 6

#include <stdio.h>

int isPalindrome(int n) {

int rev = 0, temp = n;

while(n > 0) {

rev = rev \* 10 + n % 10;

n /= 10;

}

return rev == temp;

}

int main() {

printf("%d\n", isPalindrome(121));

return 0;

}

// Program 7

#include <stdio.h>

void fibonacci(int n) {

int a = 0, b = 1, c, i;

for(i = 0; i < n; i++) {

printf("%d ", a);

c = a + b;

a = b;

b = c;

}

printf("\n");

}

int main() {

fibonacci(5);

return 0;

}

// Program 8

#include <stdio.h>

int lcm(int a, int b) {

int max = (a > b) ? a : b;

while(1) {

if(max % a == 0 && max % b == 0) return max;

max++;

}

}

int main() {

printf("%d\n", lcm(4, 6));

return 0;

}

// Program 9

#include <stdio.h>

int gcd(int a, int b) {

while(b != 0) {

int t = b;

b = a % b;

a = t;

}

return a;

}

int main() {

printf("%d\n", gcd(8, 12));

return 0;

}

// Program 10

#include <stdio.h>

void perfectInRange(int start, int end) {

int i, j, sum;

for(i = start; i <= end; i++) {

sum = 0;

for(j = 1; j < i; j++) {

if(i % j == 0) sum += j;

}

if(sum == i) printf("%d ", i);

}

printf("\n");

}

int main() {

perfectInRange(1, 1000);

return 0;

}