

# 1) Sum of multiples of 3 or 5 below 1000

c

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

```
int main() {  
    int sum = 0;  
    for (int i = 1; i < 1000; i++) {  
        if (i % 3 == 0 || i % 5 == 0) {  
            sum += i;  
        }  
    }  
    printf("Sum = %d\n", sum);  
    return 0;  
}
```

## 2) Roots of quadratic equation

c

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

int main() {
    double a, b, c, D, x1, x2, real, imag;

    printf("Enter coefficients a, b, c: ");
    scanf("%lf %lf %lf", &a, &b, &c);

    D = b * b - 4 * a * c;

    if (D > 0) {
        x1 = (-b + sqrt(D)) / (2 * a);
        x2 = (-b - sqrt(D)) / (2 * a);
        printf("Roots are real and distinct: %.2lf and %.2lf\n", x1, x2);
    }
    else if (D == 0) {
        x1 = -b / (2 * a);
        printf("Roots are real and equal: %.2lf\n", x1);
    }
    else {
        real = -b / (2 * a);
        imag = sqrt(-D) / (2 * a);
        printf("Roots are complex: %.2lf + %.2lfi and %.2lf - %.2lfi\n", real, imag, real, imag);
    }
    return 0;
}
```

### 3) Largest among three numbers

c

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

```
int main() {
```

```
    int a, b, c, largest;
```

```
    printf("Enter three numbers: ");
```

```
    scanf("%d %d %d", &a, &b, &c);
```

```
    if (a >= b && a >= c)
```

```
        largest = a;
```

```
    else if (b >= a && b >= c)
```

```
        largest = b;
```

```
    else
```

```
        largest = c;
```

```
    printf("Largest number = %d\n", large
```

```
    return 0;
```

```
}
```

## 4) Even or Odd

c

```
#include <stdio.h>

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

    if (n % 2 == 0)
        printf("%d is Even\n", n);
    else
        printf("%d is Odd\n", n);

    return 0;
}
```

## 5) Remainder and Quotient

c

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

```
int main() {
```

```
    int num, divisor, quotient, remainder
```

```
    printf("Enter number and divisor: ");
```

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

```
    quotient = num / divisor;
```

```
    remainder = num % divisor;
```

```
    printf("Quotient = %d, Remainder = %d
```

```
    return 0;
```

```
}
```

## 6) Even numbers between 100 and 200

c

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

```
int main() {  
    printf("Even numbers between 100 and  
    for (int i = 100; i <= 200; i += 2) {  
        printf("%d ", i);  
    }  
    printf("\n");  
    return 0;  
}
```