0 Common C Programming Interview Questions with Solutions (Basic Versions

1. Print 'Hello, World!'

```
#include <stdio.h>

int main() {
    printf("Hello, World!\n");
    return 0;
}
```

2. Check if a number is even or odd

```
#include <stdio.h>

int main() {
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    if (num % 2 == 0)
        printf("Even number");
    else
        printf("Odd number");
    return 0;
}
```

3. Check if a number is prime

```
#include <stdio.h>

int main() {
    int num, i, flag = 0;
    printf("Enter a number: ");
    scanf("%d", &num);
    for(i = 2; i <= num/2; ++i) {
        if(num % i == 0) {
            flag = 1;
            break;
        }
    }
    if (num <= 1)
        printf("Not prime");
    else if (flag == 0)
        printf("Prime number");
    else
        printf("Not prime");
    return 0;
}
```

4. Print Fibonacci series up to n terms

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

```
int main() {
    int n, t1 = 0, t2 = 1, nextTerm;
    printf("Enter the number of terms: ");
    scanf("%d", &n);
    for (int i = 1; i <= n; ++i) {
        printf("%d ", t1);
        nextTerm = t1 + t2;
        t1 = t2;
        t2 = nextTerm;
    }
    return 0;
}
```

5. Find factorial of a number using recursion

```
#include <stdio.h>

int factorial(int n) {
    if(n == 0)
        return 1;
    else
        return n * factorial(n - 1);
}

int main() {
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    printf("Factorial: %d", factorial(num));
    return 0;
}
```

6. Reverse a number

```
#include <stdio.h>

int main() {
    int num, reversed = 0, remainder;
    printf("Enter an integer: ");
    scanf("%d", &num);
    while (num != 0) {
        remainder = num % 10;
        reversed = reversed * 10 + remainder;
        num /= 10;
    }
    printf("Reversed number = %d", reversed);
    return 0;
}
```

7. Check if a number is palindrome

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

```
int main() {
    int num, reversed = 0, temp, remainder;
    printf("Enter an integer: ");
    scanf("%d", &num);
    temp = num;
    while (temp != 0) {
        remainder = temp % 10;
        reversed = reversed * 10 + remainder;
        temp /= 10;
    }
    if (num == reversed)
        printf("Palindrome number");
    else
        printf("Not a palindrome");
    return 0;
}
```

8. Check if a number is Armstrong number

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

int main() {
    int num, originalNum, remainder, result = 0, n = 0;
    printf("Enter an integer: ");
    scanf("%d", &num);
    originalNum = num;
    while (originalNum != 0) {
        originalNum /= 10;
        ++n;
    }
    originalNum = num;
    while (originalNum != 0) {
        remainder = originalNum % 10;
        result += pow(remainder, n);
        originalNum /= 10;
    }
    if (result == num)
        printf("Armstrong number");
    else
        printf("Not an Armstrong number");
    return 0;
}
```

9. Print sum of digits

```
#include <stdio.h>

int main() {
    int num, sum = 0, digit;
    printf("Enter an integer: ");
    scanf("%d", &num);
    while (num != 0) {
        digit = num % 10;
```

```
        sum += digit;
        num /= 10;
    }
    printf("Sum of digits: %d", sum);
    return 0;
}
```

10. Swap two numbers (without third variable)

```
#include <stdio.h>

int main() {
    int a, b;
    printf("Enter two numbers: ");
    scanf("%d %d", &a, &b);
    a = a + b;
    b = a - b;
    a = a - b;
    printf("After swapping: a = %d, b = %d", a, b);
    return 0;
}
```