

```
23.c  U  C day14.c U  C day14.2.c U  C day15.c U  C 15.2.c  U  C day16.c U X  C day16.2.c U  C day17.c U  C day17.2.c U  08  D  S  B  ...  
c++ > C day16.c > ...  
3  int main() {  
13     if (num == 0) {  
16         }  
17  
18     // Convert decimal to binary  
19     while (num > 0) {  
20         binary[i] = num % 2; // Store remainder  
21         num = num / 2;      // Divide by 2  
22         i++;  
23     }  
24  
25     // Print binary in reverse order  
26     printf("Binary: ");  
27     for (int j = i - 1; j >= 0; j--) {  
28         printf("%d", binary[j]);  
29     }  
30     printf("\n");  
31  
32     return 0;  
33 }  
34
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day16.c -o day16 && "/Users/rishabhtrivedi/Documents/vs/c++/"day16  
rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day16.c -o day16 && "/Users/  
y16  
Enter a number: 5  
Binary: 101  
rishabhtrivedi@Rishabhs-MacBook-Air vs %
```

Ln 34, Col 1 Spaces: 4 UTF-8 LF { } C ⚡ Go Live macos-clang-x64 ⚡ Prettier ⚡

The screenshot shows the Visual Studio Code interface with a dark theme. The Explorer sidebar on the left lists various C++ files in a project structure. The main editor area displays a C++ program named `day16.2.c`. The code reads a number from the user, reverses it, and checks if the original number and the reversed number are equal. The terminal at the bottom shows the execution of the program and its output.

```
23.c U | C day14.c U | C day14.2.c U | C day15.c U | C 15.2.c U | C day16.c U | C day16.2.c U X | C day17.c U | C day17.2.c U | ...
```

```
int main() {
    scanf("%d", &num);

    originalNum = num; // Store original number for comparison

    // Reverse the number
    while (num != 0) {
        remainder = num % 10;
        reversed = reversed * 10 + remainder;
        num = num / 10;
    }

    // Check if palindrome
    if (originalNum == reversed)
        printf("%d is a palindrome number.\n", originalNum);
    else
        printf("%d is not a palindrome number.\n", originalNum);

    return 0;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day16.2.c -o day16.2 && "/Users/rishabhtrivedi/Documents/vs/c++/"day16.2
rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day16.2.c -o day16.2 && "/Users/rishabhtrivedi/Documents/vs/c++/"day16.2
/"day16.2
Enter a number: 5
5 is a palindrome number.
rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

Ln 27, Col 1 Spaces: 4 UTF-8 LF () C Go Live macos-clang-x64 Prettier

The screenshot shows a Visual Studio Code (VS Code) interface with a dark theme. The left sidebar contains icons for Explorer, Open Editors, and a search bar labeled 'vs'. The 'OPEN EDITORS' section shows multiple tabs for C++ files: '23.c' (U), 'day14.c U', 'day14.2.c U', 'day15.c U', '15.2.c U', 'day16.c U', 'day16.2.c U', 'day17.c U X', 'day17.2.c U', and 'day17.2.c U'. The main editor area displays the following C++ code:

```
23.c U | C day14.c U | C day14.2.c U | C day15.c U | C 15.2.c U | C day16.c U | C day16.2.c U | C day17.c U X | C day17.2.c U | C day17.2.c U | D | S | ...  
c++ > C day17.c > ...  
1 #include <stdio.h>  
2 #include <math.h>  
3  
4 int main() {  
5     int num, originalNum, remainder, n = 0;  
6     double result = 0.0;  
7  
8     // Input number from user  
9     printf("Enter a number: ");  
10    scanf("%d", &num);  
11  
12    originalNum = num;  
13  
14    // Count number of digits  
15    while (originalNum != 0) {  
16        originalNum /= 10;  
17        ++n;  
18    }  
19  
20    originalNum = num;  
21  
22    // Calculate the sum of digits raised to the power n  
23    while (originalNum != 0) {  
24        remainder = originalNum % 10;  
25        result += pow(remainder, n);  
26        originalNum /= 10;  
27    }  
28  
29    // Check if Armstrong  
30    if ((int)result == num)  
31        printf("%d is an Armstrong number.\n", num);  
32    else  
33        printf("%d is not an Armstrong number.\n", num);  
34  
35    return 0;  
36 }
```

The bottom navigation bar includes 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', 'TERMINAL', 'PORTS', and 'SPELL CHECKER'. The 'TERMINAL' tab is active, showing the command line output:

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day17.c -o day17 && "/Users/rishabhtrivedi/Documents/vs/c++/"day17  
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day17.c -o day17 && "/Users/rishabhtrivedi/Documents/vs/c++/"da  
y17  
Enter a number: 5  
5 is an Armstrong number.  
● rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

The status bar at the bottom shows 'Ln 37, Col 1', 'Spaces: 4', 'UTF-8', 'LF', '(.) C', 'Go Live', 'macos-clang-x64', and 'Prettier'.

```

int main() {
    int num, i, isPrime = 1; // Assume number is prime initially

    // Input number from user
    printf("Enter a number: ");
    scanf("%d", &num);

    // Check for numbers less than 2
    if (num <= 1) {
        printf("%d is not a prime number.\n", num);
        return 0;
    }

    // Check divisibility from 2 to num/2
    for (i = 2; i <= num / 2; i++) {
        if (num % i == 0) {
            isPrime = 0; // Found a divisor
            break;
        }
    }

    // Print result
    if (isPrime)
        printf("%d is a prime number.\n", num);
    else
        printf("%d is not a prime number.\n", num);

    return 0;
}

```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER Code - C++ Code - C++  
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day17.2.c -o day17.2 && "/Users/rishabhtrivedi/Documents/vs/c++/"day17.2  
rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day17.2.c -o day17.2 && "/Users/rishabhtrivedi/Documents/vs/c++/"  
"/day17.2  
Enter a number: 6  
6 is not a prime number.  
rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

EXPLORER OPEN EDITORS VS C day14.2.c U C day15.c U C 15.2.c U C day16.c U C day16.2.c U C day17.c U C day17.2.c U C day18.c X C day18.2.c D ...

```
1 #include <stdio.h>
2
3 int main() {
4     int num, i;
5
6     // Input number from user
7     printf("Enter a number: ");
8     scanf("%d", &num);
9
10    // Print all factors
11    printf("Factors of %d are: ", num);
12    for (i = 1; i <= num; i++) {
13        if (num % i == 0)
14            printf("%d ", i);
15    }
16
17    printf("\n");
18    return 0;
19 }
20
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day18.c -o day18 && "/Users/rishabhtrivedi/Documents/vs/c++/"day18
rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day18.c -o day18 && "/Users/rishabhtrivedi/Documents/vs/c++/"day18
y18
Enter a number: 5
Factors of 5 are: 1 5
rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

c++ master*+ 0 0 △ 0 . % Debug Indexing completed.

The screenshot shows a dark-themed code editor interface, likely Visual Studio Code, with the following details:

- EXPLORER**: Shows a file tree under a 'c++' folder containing files like Danglin..., day11, day14, day14.2, day14.c, day15, day15.c, day16, day16.2, day16.2.c, day16.c, day17, day17.2, day17.c, day18, day18.2, day18.2.c, day18.c, Definea..., DMA, DMA.c, DoWhile..., ex1, ex1.c, exp3.1, exp3.1.c, Exp6.1, Exp6.1.c, and Exp6.2.
- OPEN EDITORS**: Shows tabs for various files: day14.2.c, day15.c, 15.2.c, day16.c, day16.2.c, day17.c, day17.2.c, day18.c, and day18.2.c (the active tab).
- Code Editor Content**: The main area contains the following C++ code:

```
#include <stdio.h>

int main() {
    int num1, num2, i, hcf;

    // Input two numbers
    printf("Enter two numbers: ");
    scanf("%d %d", &num1, &num2);

    // Find HCF using loop
    for (i = 1; i <= num1 && i <= num2; i++) {
        if (num1 % i == 0 && num2 % i == 0)
            hcf = i;
    }

    // Display result
    printf("HCF (GCD) of %d and %d is: %d\n", num1, num2, hcf);
    return 0;
}
```
- TERMINAL**: Shows the command line output of the program execution:

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day18.2.c -o day18.2 && "/Users/rishabhtrivedi/Documents/vs/c++/" day18.2
rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day18.2.c -o day18.2 && "/Users/rishabhtrivedi/Documents/vs/c++/" day18.2
Enter two numbers: 4 5
HCF (GCD) of 4 and 5 is: 1
rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```
- Bottom Status Bar**: Shows indexing status, file navigation icons, and system information like Ln 21, Col 1, Spaces: 4, UTF-8, LF, C, Go Live, macos-clang-x64, and Prettier.