Even Odd in C++

```
#include <iostream>
using namespace std;

void fun(int x) {
    if ((x & 1) == 0) {
        cout << "even" << endl;
    } else {
        cout << "odd" << endl;
    }
}

int main() {
    int x = 27;
    fun(x);

    return 0;
}
```

Input:

- `x = 27`
- Binary of `27` = `11011`

💡 Logic:

```
if ((x & 1) == 0)
```

- `x & 1` checks the least significant bit (LSB)
- If the LSB is 1 → **odd**
- If the LSB is 0 → **even**

🧮 Dry Run:

Expression	Value	Explanation
`x`	`27`	Decimal input
`x` (binary)	`11011`	Binary representation of 27
`x & 1`	`11011 & 00001 = 00001`	LSB is 1 → odd
`== 0`	`false`	So it goes to the `else` block
Output	`odd`	✅

✅ Final Output:

```
odd
```

odd