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| **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 | |