|  |  |
| --- | --- |
| **Kerninghan in C++** | |
| #include <iostream>  using namespace std;  int main() {  int n = 5;  int c = 0;  while (n != 0) {  int rs = n & -n; // rightmost set bit  n = n - rs; // clear the rightmost set bit  c++; // increment count  }  cout << c << endl;  return 0;  } | Binary of 5: Decimal: 5  Binary: 101  Set bits: 2 🧾 Dry Run Table:  | **Iteration** | **n (decimal)** | **n (binary)** | **rs = n & -n** | **rs (binary)** | **n = n - rs** | **Count c** | | --- | --- | --- | --- | --- | --- | --- | | 1 | 5 | 101 | 1 | 001 | 4 | 1 | | 2 | 4 | 100 | 4 | 100 | 0 | 2 |  ✅ Final Output: 2 |
| 2 | |