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**Number conversion from decimal to binary and binary to decimal**

#include <stdio.h>

void decimalToBinary(int decimal\_num, char binary[8]) {

for (int i = 7; i >= 0; i--) {

binary[i] = (decimal\_num % 2) + '0';

decimal\_num = decimal\_num / 2;

}

}

int binaryToDecimal(const char binary[8]) {

int decimal = 0;

int multiplier = 1;

for (int i = 7; i >= 0; i--) {

decimal += (binary[i] - '0') \* multiplier;

multiplier \*= 2;

}

return decimal;

}

int main() {

int decimal\_number = 100;

char binary\_representation[8];

decimalToBinary(decimal\_number, binary\_representation);

printf("The binary representation of 100 is: %s\n", binary\_representation);

char binary\_input[] = "01100100";

int converted\_decimal = binaryToDecimal(binary\_input);

printf("The decimal representation of 01100100 is: %d\n", converted\_decimal);

return 0;

}