CRC process:#include <stdio.h>#include <string.h>#define POLYNOMIAL 0x9#define DATA\_BITS 7void crcDivide(int data[], int divisor[], int data\_len, int divisor\_len) {    for (int i = 0; i <= data\_len - divisor\_len; i++) {        if (data[i] == 1) {            for (int j = 0; j < divisor\_len; j++) {                data[i + j] = data[i + j] ^ divisor[j];            }        }    }}void crcEncode(int data[], int divisor[], int data\_len, int divisor\_len) {    int total\_len = data\_len + divisor\_len - 1;    int encoded\_data[total\_len];    for (int i = 0; i < data\_len; i++) {        encoded\_data[i] = data[i];    }    for (int i = data\_len; i < total\_len; i++) {        encoded\_data[i] = 0;    }    crcDivide(encoded\_data, divisor, total\_len, divisor\_len);    printf("Codeword (Data + CRC): ");    for (int i = 0; i < data\_len; i++) {        printf("%d", data[i]);    }    for (int i = data\_len; i < total\_len; i++) {        printf("%d", encoded\_data[i]);    }    printf("\n");}void crcDecode(int codeword[], int divisor[], int codeword\_len, int divisor\_len) {    int remainder[codeword\_len];    for (int i = 0; i < codeword\_len; i++) {        remainder[i] = codeword[i];    }    crcDivide(remainder, divisor, codeword\_len, divisor\_len);    int error\_detected = 0;    for (int i = codeword\_len - divisor\_len + 1; i < codeword\_len; i++) {        if (remainder[i] != 0) {            error\_detected = 1;            break;        }    }    if (error\_detected) {        printf("Error detected in the received codeword.\n");    } else {        printf("No error detected in the received codeword.\n");    }}int main() {    int data[DATA\_BITS];    int divisor[] = {1, 0, 0, 1};    printf("Enter the data bits (7 bits): ");    for (int i = 0; i < DATA\_BITS; i++) {        scanf("%d", &data[i]);    }    int divisor\_len = sizeof(divisor) / sizeof(divisor[0]);    int codeword\_len = DATA\_BITS + divisor\_len - 1;    crcEncode(data, divisor, DATA\_BITS, divisor\_len);    int codeword[codeword\_len];    printf("Enter the received codeword (%d bits): ", codeword\_len);    for (int i = 0; i < codeword\_len; i++) {        scanf("%d", &codeword[i]);    }    crcDecode(codeword, divisor, codeword\_len, divisor\_len);    return 0;}