```c
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#include <stdio.h>


int main(){
        int choice, base, dec_input;                                          //count for
controlling the binary digits

        char my_char;
//controller for controlling the if the input has a trouble or not

        int count=7,y0,y1,y2=0, dec_counter=0, controller=0; //dec_controller for controlling the
decimal digits


        do{
                printf("Welcome to Octal to Binary Encoder!\n\n");

                printf("  (1) Compute and Display the output\n");

                printf("  (2) Quit\n");

                printf("You choose: ");

                scanf("%d",&choice);

                printf("You have chosen option %d\n\n",choice);


                if (choice == 1){
                        printf("Which base will you use to enter input (base 2 or base 10)? ");

                        scanf("%d",&base);

                        if (base ==2){
                                controller=0;

                                while(controller==0){
                                        y0 =0,y1 =0,y2 =0;  //reassaigning the variables for the other
iterations

                                        count =7;


                                        printf("Please enter your input: ");
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fflush(stdin);

do{

    scanf("%c",&my_char);

    if((count == 1 || count== 3 || count==5 || count==7)&&my_char!='\n'){

        if(my_char == '1')
            y0=1;
        controller=1;
    }

    if((count == 2 || count== 3 || count==6 || count==7)&&my_char!='\n'){

        if(my_char == '1')
            y1=1;
        controller=1;
    }

    if((count == 4 || count== 5 || count==6 || count==7)&&my_char!='\n'){

        if(my_char == '1')
            y2=1;
        controller=1;
    }
    count--;

    if(my_char>49 && my_char!='\n'){
        printf("%c",my_char);
        controller=0;
    }
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                                }while(my_char!='\n');
                                if (controller == 0)
                                        printf("  is not a valid number in base 2! Please try
again!\n\n");
                                if (count>-2){
                                        printf("You entered less than 8 bits! Please try
again!\n");
                                        controller=0;
                                }
                                if (count<-2){
                                        printf("You entered more than 8 bits! Please try
again!\n");
                                        controller=0;
                                }
                        }

                        printf("Y2 is %d Y1 is %d Y0 is %d\n\n",y2,y1,y0);
                }

                else if(base == 10){
                        printf("Please enter your input: ");
                        do{
                                scanf("%d",&dec_input);
                                if (dec_input >255){
                                        printf("Decimal %d cannot be represented with 8
bits. Please try again!\n",dec_input);
                                        printf("Please enter your input: ");
                                }
                        }while(dec_input >255);

                        y0 =0,y1 =0,y2 =0; //reassaigning the variables for the other
iterations
```

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                    while(dec_input!=0){
                        if (dec_input%2 == 1){
                            if (dec_counter == 1 || dec_counter == 3 ||
dec_counter == 5 || dec_counter==7)
                                y0=1;

                            if(dec_counter == 2 || dec_counter == 3 ||
dec_counter == 6 || dec_counter == 7)
                                y1=1;

                            if(dec_counter == 4 || dec_counter == 5 ||
dec_counter == 6 || dec_counter == 7)
                                y2=1;
                        }

                        dec_input/=2;
                        dec_counter++;
                    }
                    printf("Y2 is %d Y1 is %d Y0 is %d\n\n",y2,y1,y0);
                }
                else
                    printf("Invalid number in base 2/10\n");
            }
            else if (choice == 2)
                printf("BYEE!!\n");
            else
                printf("Please enter 1 or 0!\n\n");
    }while(choice!=2);


    return 0;
}
```