

Hangman Game :

- o Take 64 bit input
- o Machine will show the number of characters on 7-segment
- o Player has 10 tries
- o Found letters will shown in TTY
- o when the game ends the user can restart

C Code :

```

while (go!) {
    char word[8] = word_input;
    int isFound[8] = 0;
    int try = 0;
    int count_letters = 8;
    for (int i = 0; i < 8; i++) {
        if (word[i] == 0) {
            count_letters--;
            isFound[i] = 1;
        }
        else break;
    }
    7segmentDisplay(count_letters);
    while (try != 10) {
        for (int i = 8 - count_letters; i < 8; i++) {
            if (isFound[i] == 0)
                TTYDisplay("_");
            else
                TTYDisplay(word[i]);
        }
        char input = input_letter;
        int found = 0;
        for (int i = 8 - count_letters; i < 8; i++) {
            if (word[i] == input) {
                found = 1;
                isFound[i] = 1;
            }
        }
    }
}

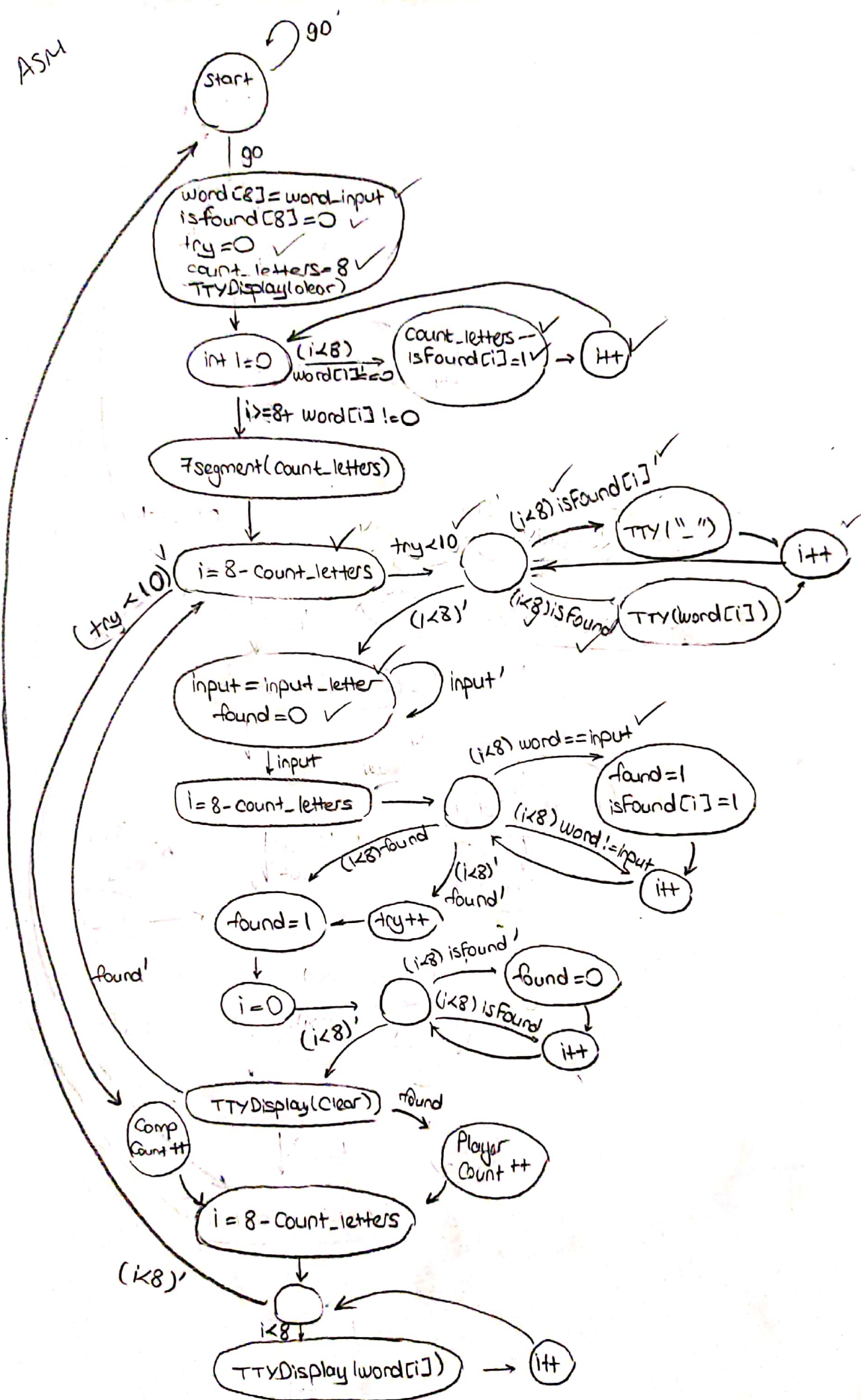
```

```

if (-found == 0)
    try++;
    found = 1;
    for (int i = 0; i < 8; i++) {
        if (isFound[i] == 0)
            found = 0;
    }
    TTYDisplay(Clear);
    if (-found == 1)
        break;
}
for (int i = 8 - count_letters; i < 8; i++) {
    TTYDisplay(word[i])
}
}

```

Start → go





Updated  
FSM

