

Dry Run:

Found the flag in the announcements section of the Discord.

Half-Time Survey:

Found the flag at the end of the survey.

A Network Problem:

Found the flag in the text of the webpage at <http://beta.utctf.live:8080/>.

UTCTF Adventure ROM 5:

Found the flag by manipulating memory addresses using the Game Boy emulator BGB.

The game was a maze that you would have to navigate by dropping down holes on either side of the level. After 10 falls, the game would either display the flag or "You Lose". This resulted in 2^{10} (1024) possible combinations.

Instead of brute forcing the combination, I used BGB's VRAM viewer and cheat functions to view and modify memory addresses. I established that the address C1C0 held the data for which fall I was on. I set this value to 09 so that any fall would either display the flag or "You Lose".

I determined that the address C1BF was responsible for the text that was displayed upon falling through the tenth hole. Text would only appear when going through the left hole. Going through the right hole would display "You Lose". After testing all previous values, going through the left hole with C1BF=56 displayed the message: "UTFLAG GUPIRHJS"