

# IIT Pokerbots 2026

## Problem Statement

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# Sneak Peek Hold'em

We strongly recommend learning the rules of Texas Hold'em before learning Sneak Peek Hold'em. Two helpful resources are [Wikipedia](#) and [Explanation Video](#).

## 1 Overview

The poker variant for the IIT Pokerbots Competition 2026 is “Sneak Peek Hold'em,” which is based on standard No-Limit Texas Hold'em with one key modification. **After the flop is dealt**, both players simultaneously submit **sealed bids** to view **one of their opponent's hole cards**. The player with the **higher bid wins the auction** and **pays the lower of the two bids** into the pot (a **second-price auction**), and is **allowed to view one of the opponent's hole cards** chosen uniformly at random, while the losing bidder receives no information. In the case of a **tie**, both players pay their bid amounts into the pot and **each gets to see one randomly selected hole card of the opponent**. After the auction, one round of betting takes place, following which the turn card is dealt, and the game continues under standard No-Limit Texas Hold'em rules. At showdown, each player forms the best possible five-card hand using any combination of their two hole cards and the five community cards to determine the winner of the pot.

## 2 Glossary

- **Community Cards:** The public cards shared by both players.
- **Hole Cards:** The two private cards dealt to each player.
- **Pot:** The total chips accumulated from bets, blinds, and bids in a hand, to be claimed by the winner of the round.
- **Chips:** A player's individual resources they use for bets and other payments during a round.
- **Wager:** A player's contribution to the pot in the current betting round.
- **Small Blind:** The smaller forced bet posted at the start of a hand to initiate the pot.
- **Big Blind:** The larger forced bet posted at the start of a hand.
- **Call:** Match the current bet to remain in the hand.
- **Cost to Call:** Chips required to match the current bet to remain in the hand.
- **Check:** A “pass” or bet of 0.
- **Fold:** Withdraw from the hand and let other player claim the pot.
- **Flop:** The stage when the first three Community cards are dealt.
- **Turn:** The stage when the fourth Community card is dealt.
- **River:** The stage when the fifth and final Community card is dealt.
- **Bid:** The amount submitted in the Sneak Peek auction; the higher bidder pays the lower bid to the pot.
- **Showdown:** The stage when players reveal their hole cards to determine the winner of the round, who claims the pot.

### 3 Game Format

A game of **Sneak Peek Hold'em** consists of multiple rounds played between two players. In each round, both players are allocated a fixed number of **chips** before any cards are dealt. At the end of each round, the change in a player's chips is added to their cumulative **bankroll**, which **starts at zero**. After all rounds are completed, the player with the **highest cumulative bankroll** is declared the **winner of the game**.

The parameters used in the competition setting are as follows:

- **Number of rounds:** 1000
- **Chips allocated per round:** 5000
- **Small blind:** 10
- **Big blind:** 20

### 4 Sequence of Play

Each round of Sneak Peek Hold'em proceeds in the following order:

1. The **Small Blind** pays 10 chips and the **Big Blind** pays 20 chips to the pot.
2. Each player is dealt two private hole cards.
3. One round of betting takes place (Pre-flop).
4. The **flop** (three community cards) is dealt.
5. The Sneak Peek **auction** takes place, where both players simultaneously submit sealed bids to view one randomly selected hole card of the opponent, as per the auction rules.
6. One round of betting takes place.
7. The **turn** (fourth community card) is dealt.
8. One round of betting takes place.
9. The **river** (fifth and final community card) is dealt.
10. One final round of betting takes place.
11. If both players remain in the hand, a **showdown** occurs, and the player with the best five-card poker hand wins the pot.

### 5 Blinds

At the beginning of each round, one player is designated as the **small blind** and the other as the **big blind**. These roles **alternate between successive rounds**. At the start of the round, the Small Blind acts first and posts **10** chips into the pot. The Big Blind then posts **20** chips into the pot. These **forced bets** initiate the pot and leaves Small blind to act next.

## 6 Betting

After the hole cards are dealt, the **first round of betting** (Pre-flop) begins, the **small blind is the first player to act**. In this first action, they can fold, call (match the Big Blind), or raise.

In all **other rounds of betting**, the **big blind is the first person to act**. In this action, the player may check (bet 0) or bet. The minimum legal bet is one big blind, that is 20 chips. The maximum legal bet is bounded by both players' remaining stack sizes.

At any point during a betting round, a player may take one of the following actions, subject to the game state: **fold**, **check** (bet 0 chips, only if there is no wager to call), **call**, or **raise**. When a player decides to raise, the minimum raise **to** (note: raise *to*, not raise *by*) is:

$$\text{Minimum Raise} = \text{Current Wager} + \text{Cost to Call} + \max(\text{Big Blind}, \text{Cost to Call})$$

$$\text{Maximum Raise} = \max(\text{Your Chips}, \text{Opponent's Chips})$$

There is **no limit on the number of consecutive raises that may occur** in a round of betting. **The round of betting ends when a player calls, when a player folds, or when both players check in a row.**

In the first round of betting, if the small blind calls right away, the round does not end. The opponent is given the opportunity to act, they can check or raise.

If the bot makes an **invalid bet** (including negative bets, fractional bets, or betting more chips than it has), it will automatically be **assumed to have folded**.

## 7 Auction

After the flop (the first three community cards) is dealt, both players participate in a **sealed-bid auction** (i.e. players submit bids simultaneously without seeing the opponent's bid) to obtain information about the opponent's hand. The player with the higher bid wins the auction and pays the lower of the two bids into the pot, implementing a **second-price auction mechanism**. The winning player is then allowed to view **one of the opponent's hole cards, chosen uniformly at random**, while the losing bidder receives no information.

In the event of a **tie**, both players pay their respective bid amounts into the pot, and **each player is allowed to view one randomly selected hole card of the opponent**. After the auction is completed, a round of betting takes place, following which the turn card is dealt. The game then continues under standard No-Limit Texas Hold'em rules.

## 8 Showdown

If both players remain in the hand after the final betting round on the river, the hand proceeds to showdown. At showdown, **each player's best five-card hand** (Hand rankings follow the standard [Texas Hold'em hierarchy](#)) is evaluated using their two hole cards and the five community cards. The **higher-ranked hand wins the pot**, and bankrolls are updated accordingly. **In case of a tie, the pot is split equally**. If a player folds at any point before showdown, the remaining player wins the pot without revealing their cards.

## 9 Constraints

- **Number of uploads per day per team** (resets at 00:00:00 hours each day): **10 uploads**
- Every time the engine queries the bot, it gets **2 seconds** to respond.
- The total response time (sum of response times of all queries for 1000 rounds) is limited to **20 seconds**.
- If the bot does not respond within the specified time limit, it is automatically assumed to have **folded**.