Write a program in solidity to create Student data. Use the following constructs:

 Structures

 Arrays

 Fallback

Deploy this as smart contract on Ethereum and Observe the transaction fee and Gas values.

// SPDX-License-Identifier: MIT

pragma solidity ^0.8.0;

contract StudentData {

    struct Student {

        uint256 id;

        string name;

        uint256 age;

    }

    Student[] public students;

    event StudentAdded(uint256 id, string name, uint256 age);

    // Add a new student record

    function addStudent(uint256 \_id, string memory \_name, uint256 \_age) public {

        Student memory newStudent = Student(\_id, \_name, \_age);

        students.push(newStudent);

        emit StudentAdded(\_id, \_name, \_age);

    }

    // Get the number of students in the array

    function getStudentCount() public view returns (uint256) {

        return students.length;

    }

    // Get student information by index

    function getStudent(uint256 index) public view returns (uint256, string memory, uint256) {

        require(index < students.length, "Student not found");

        Student memory student = students[index];

        return (student.id, student.name, student.age);

    }

    // Receive ether function (accept incoming Ether)

    receive() external payable {

        // Perform any necessary actions when receiving Ether

    }

}