```
//Student Name : Sagar Kapase
//Roll No : BEA-07
// SPDX-License-Identifier: GPL-3.0
pragma solidity ^0.8.16;

contract StudentContract
{
    struct Student
    {
        uint stud_id;
        string name;
        uint marks;
    }
    Student[5] s;
    uint cnt = 0;
    constructor()
    {
        for(uint i=0;i<5;i++)
        {
            s[i].stud_id = 0;
            s[i].name = "";
            s[i].marks = 0;
        }
    }

    function getData(uint id) public view returns(string memory,uint)
    {
        /* Calling a revert statement implies an exception is thrown,
        the unused gas is returned and the state reverts to its original
state. */
        if(id > cnt)
            revert("Invalid STUDENT ID");
        else
        {
            for(uint i=0;i<5;i++)
            {
                if(s[i].stud_id == id)
                    return (s[i].name,s[i].marks);
            }
        }
    }
    function setData(string calldata nm,uint mk) public returns(string
memory)
    {
        /* Calling a revert statement implies an exception is thrown,
        the unused gas is returned and the state reverts to its original
state. */
        if(cnt > 5)
            revert("ARRAY IS FULL");
        else
        {
                cnt += 1;
                s[cnt-1].stud_id = cnt;
                s[cnt-1].name = nm;
                s[cnt-1].marks = mk;
        }
    }
    function search(uint id) public view returns(string memory,uint)
    {
        /* Calling a revert statement implies an exception is thrown,
        the unused gas is returned and the state reverts to its original
state. */
        if(id > cnt)
            revert("Invalid STUDENT ID");
        else
        {
            for(uint i=0;i<5;i++)
            {
                if(s[i].stud_id == id)
                {
                    return (s[i].name,s[i].marks);
                }
            }
        }
    }
     // This function is called for all messages sent to
    // this contract, except plain Ether transfers
     // Any call with non-empty calldata to this contract will execute
    // the fallback function (even if Ether is sent along with the call)
    fallback() external payable
    {

    }
}
```