All Memory:

Code:

//SPDX-License-Identifier:MIT

pragma solidity 0.8.6;

contract structure {

    struct Book{

        string title;

        string author;

        uint bookID;

        uint price;

    }

    Book book;

    function setBook() public {

        book= Book("Blokchain for beginners","Ineuron",4,1000);

    }

    function getBook() public view returns(Book memory){

        return book;

    }

    function getBookId() public view returns(uint){

        return book.bookID;

    }

    function getTitle() public view returns(string memory){

        return book.title;

    }

    function getAuthor() public view returns(string memory){

        return book.author;

    }

    function getPrice() public view returns(uint){

        return book.price;

    }

}

Gas Report:

|  |  |
| --- | --- |
| **gas** | 549436 gas |
| **transaction cost** | 477770 gas |
| **execution cost** | 477770 gas |

As struct is storage data we cannot make it to calldata and throwing error.

The same goes to variable of struct. When I change it calldata, it says “Cannot implicitly convert storage variable\_name to calldata variable\_name ”.

When try to change return type to storage it says it should be memory or calldata.