Homework 5

Answers

- 1. The codecopy overwrites the first memory slots including the free memory pointer
- 2. We could remove the free memory pointer initialisation code since it is not used
- 3. You can in Remix by sending wei as you deploy the contract

4.

```
function add() pure public returns (uint256) {
    assembly{
        let ptr := mload(0x40)
        let free_mem := add(ptr, 0x20)
        let result := add(0x07, 0x08)
        mstore(free_mem, result)
        return(free_mem, 0x20)
    }
}
```

5. It is used in delegate calls and proxy contracts and upgradable contracts