

### **EXPERIMENT NO: 03**

```
contract Bank{
mapping(address => uint) public user_account;
mapping(address => bool) public user_exist;
function create_account() public payable returns(string memory){
require(user_exist[msg.sender] == false, "Account Already created!");
user_account[msg.sender] = msg.value;
user_exist[msg.sender] = true;
return "Account created";
}
function deposit(uint amount) public payable returns(string memory){
require(user_exist[msg.sender] == true, "Account not created!");
require(amount > 0, "Amount should be greater than 0");
user_account[msg.sender] += amount;
return "Amount deposited successfully";
}
function withdraw(uint amount) public payable returns(string memory){
require(user_exist[msg.sender] == true, "Account not created!");
require(amount > 0, "Amount should be greater than 0");
require(user_account[msg.sender] >= amount, "Amount is greater than money deposited");
user_account[msg.sender] -= amount;
return "Amount withdrawn successfully";
}
function account_balance() public view returns(uint){
return user_account[msg.sender];
}
function account_exists() public view returns(bool){
return user_exist[msg.sender];
}
}
```