

```

// Here is JavaScript part
/**
 * register account
 */
function register(){
    var name=document.getElementById("account").value;
    var password=document.getElementById("password").value;

    sessionStorage.setItem('name',name);
    sessionStorage.setItem('password',password);

    window.location.href= './login.html';
}

function login(){
    var name1=document.getElementById("account").value;
    var password1=document.getElementById("password").value;
    var name = sessionStorage.getItem('name');
    var password = sessionStorage.getItem('password');
    if(name==name1 && password==password1){
        alert("Welcome to the bank")

        sessionStorage.setItem("balance",0);
        success()
    }
    else{
        alert("Wrong password or account, please try again")
    }
}
function success(){
    document.getElementById("success")
    window.location.href= './account.html'

}

var profitpers=[0.08,0.04,0.05,0.025,0.02]
var years = [20,10,15,5,0]

/**
 * check balances
 */
function checkbalance(){
    alert("Your balance is "+ sessionStorage.getItem("balance"))
}

```

```
/**  
 * withdraw money  
 */  
  
function withdraw(){  
    var withdraw = prompt("How many do you want to withdraw?")  
    if (withdraw == "" || withdraw == null){  
        alert ("wrong input!")  
        withdraw = 0  
    }  
    else{  
        var balance = parseInt(sessionStorage.getItem("balance"))  
        balance = balance - parseInt(withdraw)  
        if(balance<0){  
            alert("There's no enough balance")  
            balance=balance + parseInt(withdraw)  
        }  
        else{  
            alert("Withdraw success, your current balance is "+ balance)  
        }  
        sessionStorage.setItem("balance",balance)  
    }  
}  
/**  
 * deposit money  
 */
```

```
function deposit(){  
    var deposit = prompt("How many do you want to deposit?")  
    var balance = parseInt(sessionStorage.getItem("balance"))  
    if (deposit == "" || deposit == null){  
        alert ("wrong input!")  
        deposit = 0  
    }  
    else{  
        balance = balance + parseInt(deposit)  
        alert("Deposit success, your current balance is "+ balance)  
        sessionStorage.setItem("balance",balance)  
    }  
}
```

```
function choice(){
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var balance = parseInt(sessionStorage.getItem("balance"))

var promptText = ""

for(let i=0;i<profitpers.length ;i++){
    if(years[i] == 0){
        var year = 'any'
    }else{
        var year = years[i]
    }
    var choiceLine = i+1 +". " + profitpers[i] * 100 + "% for each year and last "+year + " years.\n"
    promptText += choiceLine
}

var choice = parseInt(prompt(promptText))

if(choice >0 && choice <= 5){
    let totalMoney = calBalanceByChoice(balance,choice)
    alert("Prediction of your balance is = " + totalMoney)
    var ensure = prompt("Are you sure to choose this interest method? Input yes or no.")
    if (ensure=="yes"){
        alert("choose success")
        alert("after "+year+" years ..... ")
        sessionStorage.setItem("balance",totalMoney)
    }
    else if(ensure=="no"){
        alert("please choose again!")
    }
    else{
        alert("wrong input!")
    }
}else{
    alert('please input a number between 1 to 5!')
}

/*
 * calculate total balance after years
 *

```

```

* @param {int} balance
* @param {int} choice
* @returns total balance
*/
function calBalanceByChoice(balance,choice){
    var profitper = profitpers[choice-1];
    if(choice >0 && choice < 5){
        var year = years[choice-1];
    }else if(choice == 5){
        var year = parseInt(prompt("choose the year you want to have"));
    }
    var totalMoney = balance;
    for(i = 1; i<= year; i++){
        totalMoney = totalMoney + balance*profitper;
    }
    return totalMoney;
}

//Here is HTML part
<html>
    <head>
        <script src=".//bank.js"></script>
    </head>
    <body>
        <div name="success">
            <label id="success"></label>
        <center> <table border="3">
            <tr>
                <td colspan="3">
                    <center>
                        Choose your option
                    </center>
                </td>
            </tr>
            <tr>
                <td>
                    Check balance
                </td>
                <td>
                    <button type="submit" id="bt1" onclick="checkbalance()">check
                    balance</button>
                </td>
            </tr>
        </table>
    </center>
</body>
</html>

```

```
</td>
</tr>
</tr>
<tr>
    <td>
        Withdraw
    </td>

<td>
    <button type="submit" id="bt2" onclick="withdraw()">withdraw</button>
</td>
</tr>
<tr>
    <td>
        Deposit
    </td>

<td>
    <button type="submit" id="bt3" onclick="deposit()">deposit</button>
</td>
</tr>

</tr>
<tr>
    <td>
        Annual interest rate
    </td>

    <td>
        <button type="submit" id="bt4" onclick="choice()">Annual interest rate choice</button>
    </td>
</tr>
</tr>
</tr>
</table></center>

</div>
<div id="show">
</div>
</body>
```

```
</html>

<html>
  <head>
    <script src = "./bank.js"></script>
  </head>
  <body>
    <h1> Register Account</h1>
    <form>

      account:<input type="text" id="account" ></input>
      password:<input type="password" id="password" ></input>
      <div>
        <button name="bt1" onclick="register()" type="button">Register</button>
      </div>
    </form>

  </body>
</html>

<html>
  <head>
    <script src = "./bank.js"></script>
  </head>
  <body>
    <form>

      account:<input type="text" id="account" ></input>
      password:<input type="password" id="password" ></input>
      <div>

        <button name="bt1" onclick="login()" type="button">Login</button>
      <div>
        <a href=".//register.html">register account</a>
      </div>
    </div>
  </form>

  </body>
</html>
```