**--CREATING CREATE ACCOUNT TABLE (CUSTOMER PERSONAL DATA)**

Create table Create\_Account(AccountNum bigint PRIMARY KEY,

First\_name Varchar(15),

Middle\_name Varchar(15),

Last\_name Varchar(15),

PhoneNo int,

Email varchar(35),

Gender char,

Age int,

Plot\_Num varchar(15),

L1\_Address varchar(255),

L2\_Address varchar(255),

Pincode int,

City Varchar(25),

State Varchar(35),

Nationality varchar(25),

Account\_type varchar(35),

Aadhaar bigint,

PanCard varchar(25),

Date\_of\_Birth date,

);

**-- CREATING TRANSACTION TABLE**

CREATE TABLE Transactions(

TransactionID VARCHAR(35) PRIMARY KEY,

Transaction\_date DATETIME DEFAULT(GETDATE()),

AccountNum bigint FOREIGN KEY REFERENCES Create\_Account(AccountNum),

Amount FLOAT,

);

**-- PROCEDURE FOR PASSBOOK GENERATION**

CREATE PROCEDURE Passbook(@AccountNum bigint, @Start\_date date, @End\_date date)

as

begin

SELECT Transaction\_Date,

Amount,

SUM(isnull(Amount,0)) OVER (ORDER BY Transaction\_date ROWS BETWEEN UNBOUNDED PRECEDING AND CURRENT ROW) as Balance

FROM Transactions

where AccountNum=@AccountNum and Transaction\_date between @Start\_date and DATEADD(DAY, 1, @End\_date)

order by Transaction\_date

end;

**--CREATING INTEREST CALCULATOR PROCEDURE**

create procedure InterestCalculation @AccountNum bigint

as

begin

with cte0 as

(SELECT AccountNum,Transaction\_Date,Amount,SUM(isnull(Amount,0)) OVER (ORDER BY Transaction\_date ROWS BETWEEN UNBOUNDED PRECEDING AND CURRENT ROW) as Balance

FROM Transactions where AccountNum = @AccountNum),

cte as

(select Transaction\_date,Balance,ROW\_NUMBER() OVER (PARTITION BY AccountNum order by Transaction\_date) AS RowNum from cte0),

cte2 as

(select Transaction\_date,Balance,0 as Daydiff From cte where RowNum=1

union all

select a.Transaction\_date,a.Balance,DATEDIFF(day,b.Transaction\_date,a.Transaction\_date) from cte a join cte b on a.RowNum=b.RowNum+1),

cte3 as

(select Transaction\_date,Balance,(case when daydiff=0 then 1 else daydiff end) Daydiff from cte2)

select round(sum(Balance\*0.05\*Daydiff/365.0),2) as Interest\_Earned from cte3

end

--exec InterestCalculation 2

**--UPDATE CUSTOMER DETAILS**

create procedure Updateinfo @AccountNum int,@PhoneNo int, @Email varchar(35),

@Plot\_Num varchar(15), @L1\_Address varchar(255),@L2\_Address varchar(255),@Pincode int,@City Varchar(25),

@State Varchar(35),@Nationality varchar(25),@Account\_type varchar(35)

as

begin

UPDATE Create\_Account

SET PhoneNo=@PhoneNo,Email=@Email,Plot\_Num=@Plot\_Num,L1\_Address=@L1\_Address,L2\_Address=@L2\_Address,

Pincode=@Pincode,City=@City,State=@State,Nationality=@Nationality,Account\_type=@Account\_type

WHERE AccountNum=@AccountNum

end

**-- CREATE ACCOUNT PROCEDURES**

CREATE PROCEDURE CREATEACCOUNT (@First\_name Varchar(15),@Middle\_name Varchar(15),@Last\_name Varchar(15),@PhoneNo bigint,@Email varchar(35),@Gender varchar(10),@Age int,@Plot\_Num varchar(15),@L1\_Address varchar(255),@L2\_Address varchar(255),@Pincode int,@City Varchar(25),@State Varchar(35),@Nationality varchar(25),@Account\_type varchar(35),@Aadhaar bigint,@PanCard varchar(25),@Date\_of\_Birth date,@Balance float)

AS

BEGIN

INSERT INTO Create\_Account (First\_name,Middle\_name,Last\_name,PhoneNo,Email,Gender,Age,Plot\_Num,L1\_Address,L2\_Address,Pincode,City,State,Nationality,Account\_type,Aadhaar,PanCard,Date\_of\_Birth,Balance)

values(@First\_name,@Middle\_name,@Last\_name,@PhoneNo,@Email,@Gender,@Age,@Plot\_Num,@L1\_Address,@L2\_Address,@Pincode,@City,@State ,@Nationality ,@Account\_type ,@Aadhaar ,@PanCard ,@Date\_of\_Birth ,@Balance)

END;