Ans:1

libname projectw "S:\Bank Project\Base SQL Macros\Data Sets";

**proc** **sort** data=projectw.geography;

by g\_brnch\_cd;

**run**;

**proc** **sort** data=projectw.loans;

by g\_brnch\_cd;

**run**;

**data** projectw.disburse\_pending;

merge projectw.geography(in=geo) projectw.loans(in=loans);

by g\_brnch\_cd;

if geo=**1** and loans=**1**;

pending\_disburse=approved-disbursd;

if pending\_disburse>**0**;

keep city approved disbursd pending\_disburse;

**run**;

**proc** **print** data=projectw.disburse\_pending;

**run**;

Ans:2

**proc** **sort** data=projectw.loans;

by e\_emp\_id;

**run**;

**proc** **sort** data=projectw.employee;

by e\_emp\_id;

**run**;

**data** projectw.emp\_prfrmnc;

merge projectw.loans(in=loans) projectw.employee(in=emp);

by e\_emp\_id;

if loans=**1** and emp=**1**;

if first.e\_emp\_id then;

do;

tapplied+applied;

tapproved+approved;

end;

if last.e\_emp\_id;

perform=tapplied-tapproved;

**run**;

**proc** **print** data=projectw.emp\_prfrmnc;

**run**;

Ans:3

**proc** **sort** data=projectw.loans;

by e\_emp\_id;

**run**;

**proc** **sort** data=projectw.employee;

by e\_emp\_id;

**run**;

**data** projectw.emp\_prfrmnc\_rejectNaccept;

merge projectw.loans(in=loans) projectw.employee(in=emp);

by e\_emp\_id;

if loans=**1** and emp=**1**;

retain Status;

if applied < approved then status="Accepted";

else status="Rejected";

**run**;

**data** projectw.accepted projectw.rejected;

set projectw.emp\_prfrmnc\_rejectNaccept;

if status="Accepted" then output projectw.accepted;

else if status="Rejected" then output projectw.rejected;

**run**;

**proc** **sort** data=projectw.emp\_prfrmnc;

by decending perform;

**run**;

**proc** **freq** data=projectw.rejected ;

tables e\_emp\_id /nocum nopercent;

**run**;

Ans:5

libname projectw "S:\Bank Project\Base SQL Macros\Data Sets";

**proc** **sort** data=porjectw.geography;

by g\_brnch\_cd;

**run**;

**proc** **sort** data=projectw.loans;

by g\_brnch\_cd;

**run**;

**data** projectw.brnchPrfrmns projectw.brnchPrfrmnsSort;

merge projectw.geography (in=geo) projectw.loans(in=loans);

by g\_brnch\_cd;

if first.g\_brnch\_cd then;

do;

tapproved+approved;

end;

if last.g\_brnch\_cd;

keep g\_brnch\_cd g\_country g\_zone g\_state G\_city g\_area g\_branch tapproved;

output projectw.brnchPrfrmnsSort;

**run**;

**proc** **sort** data=projectw.brnchPrfrmnsSort;

by descending tapproved;

**run**;

**proc** **print** data=projectw.brnchPrfrmnsSort (obs=**5**);

**run**;

b)

**proc** **sort** data=porjectw.geography;

by g\_brnch\_cd;

**run**;

**proc** **sort** data=projectw.loans;

by g\_brnch\_cd;

**run**;

**data** projectw.brnchPrfrmnsloans projectw.brnchPrfrmnsSortloans;

merge projectw.geography (in=geo) projectw.loans(in=loans);

by g\_brnch\_cd;

if first.g\_brnch\_cd then;

do;

tapplied+applied;

end;

if last.g\_brnch\_cd;

keep g\_brnch\_cd g\_country g\_zone g\_state G\_city g\_area g\_branch tapplied;

output projectw.brnchPrfrmnsSortloans;

**run**;

**proc** **sort** data=projectw.brnchPrfrmnsSortloans;

by tapplied;

**run**;

**proc** **print** data=projectw.brnchPrfrmnsSortloans (obs=**5**);

**run**;

c)

d)

**proc** **sort** data=porjectw.geography;

by g\_brnch\_cd;

**run**;

**proc** **sort** data=projectw.loans;

by g\_brnch\_cd;

**run**;

**data** projectw.brnchPrfrmnsapproved;

merge projectw.geography (in=geo) projectw.loans(in=loans);

by g\_brnch\_cd;

if first.g\_brnch\_cd then;

do;

tapproved+approved;

end;

if last.g\_brnch\_cd;

keep g\_brnch\_cd g\_country g\_zone g\_state G\_city g\_area g\_branch tapproved;

**run**;

**proc** **sort** data=projectw.brnchPrfrmnsapproved;

by tapproved;

**run**;

**proc** **print** data=projectw.brnchPrfrmnsapproved(obs=**5**);

**run**;

Ans:6

**proc** **sort** data=projectw.loans;

by sc\_chnl\_cd;

**run**;

**proc** **sort** data=projectw.saleschannel;

by sc\_chnl\_cd;

**run**;

**data** projectw.loansSalesChannel;

merge projectw.loans(in=loans) projectw.saleschannel (in=salesC);

if loans=**1** and salesC=**1**;

if first.sc\_chnl\_cd then;

do;

Tapplied+applied;

end;

if last.sc\_chnl\_cd;

keep sc\_chnl sc\_chnl\_cd Tapplied;

**run**;

**proc** **sort** data=projectw.loansSalesChannel;

by tapplied;

**run**;

**proc** **print** data=projectw.loansSalesChannel (obs=**20**);

**run**;

Ans:14

**data** projectw.active\_customers projectw.Inactive\_Customers projectw.Dormant\_Customers projectw.none;

set projectw.customer;

if c\_cust\_status = "Active" then output projectw.active\_customers;

else if c\_cust\_status="Inactive" then output projectw.inactive\_customers;

else if c\_cust\_status = "Dormant" then output projectw.Dormant\_customers;

else output projectw.none;

**run**;

**proc** **print** data=projectw.active\_Customers;

**run**;

**proc** **print** data=projectw.inactive\_Customers;

**run**;

**proc** **print** data=projectw.dormant\_Customers;

**run**;

Ans:10

**proc** **sort** data=projectw.loans out=projectw.loansbympcode;

by mpcode;

**run**;

**proc** **sort** data=projectw.maturityperiod out=projectw.maturityperiodso;

by mpcode;

**run**;

**data** projectw.lonsandmaturity;

merge projectw.loansbympcode(in=loans) projectw.maturityperiodso (in= mpso);

by mpcode;

if loans and mpso;

**run**;

**proc** **sort** data=projectw.lonsandmaturity;

by mp\_band;

**run**;

**proc** **sort** data=projectw.maturityperiodso;

by mp\_band;

**run**;

**data** projectw.matureloans;

merge projectw.lonsandmaturity(in=lm) projectw.maturityperiodso(in=mps);

by mp\_band;

if first.mp\_band then;

do;

tapproved+approved;

end;

if last.mp\_band;

keep mp\_band tapproved;

**run**;

**proc** **print** data=projectw.matureloans;

**run**;

Ans:11

**a)**

**proc** **sort** data=projectw.time;

by time\_code;

**run**;

**proc** **sort** data=projectw.loans;

by time\_code;

**run**;

**data** projectw.loansbytime;

merge projectw.loans (in=loans) projectw.time(in=tim);

by time\_code;

if loans and tim;

keep applied year;

**run**;

**proc** **sort** data=projectw.loansbytime;

by year;

**run**;

**proc** **sort** data=projectw.time;

by year;

**run**;

**data** projectw.loansbyyear;

merge projectw.loansbytime(in=lt) projectw.time(in=t);

by year;

if first.year then;

do;

Tapplied+applied;

end;

if last.year;

keep year tapplied;

**run**;

**proc** **sort** data=projectw.loansbyyear;

by tapplied;

**run**;

**proc** **print** data=projectw.loansbyyear;

**run**;

b)

**Ans:19**

**proc** **sort** data=projectw.customer;

by c\_incomegrp;

**run**;

**proc** **freq** data=projectw.customer;

tables c\_incomegrp/nocum nopercent;

**run**;

Ans:20

**proc** **sort** data=projectw.customer;

by c\_city;

**run**;

**proc** **freq** data=projectw.customer;

tables c\_city / nocum nopercent;

**run**;

Ans:24

**proc** **format**;

value age **18**-**25**='Young'

**26**-**45**='Middle Age'

**46**-**100**='Senior Citizens';

**run**;

**proc** **sort** data=projectw.customer;

by c\_age;

**run**;

**proc** **freq** data=projectw.customer;

format c\_age age.;

tables c\_age / nocum nopercent;

**run**;

Ans:21

**proc** **sort** data=projectw.customer out=projectw.custsort;

by cust\_code;

**run**;

**proc** **sort** data=projectw.loans out=projectw.loansort;

by cust\_code;

**run**;

**data** projectw.custtype;

merge projectw.custsort(in=cs) projectw.loansort(in=ct);

by cust\_code;

if cs and ct;

retain Status ;

if applied>approved then Status="Rejected";

else if applied < approved then Status="Disbursed";

**run**;

**proc** **sort** data=projectw.custtype;

by cust\_type status;

**run**;

**proc** **freq** data=projectw.custtype;

tables cust\_type status;

**run**;

Ans:22

**proc** **tabulate** data=projectw.customer;

class c\_country c\_city c\_emp\_status;

table c\_country\*c\_city \* c\_emp\_status ;

**run**;