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CREATE TABLE CAMERA
  (C_IDCamera NUMBER(5,0),
  C_Tipo VARCHAR2(20 BYTE),
  C_Prezzo NUMBER(5,0),
  PRIMARY KEY (C_IDCamera)
);

CREATE TABLE CLIENTE
  (C_IDCliente NUMBER(5,0),
  C_Nome VARCHAR2(20 BYTE),
  C_Cognome VARCHAR2(20 BYTE),
  PRIMARY KEY (C_IDCliente)
);

CREATE TABLE SOGGIORNO
  (S_DataInizio DATE,
  S_DataFine DATE,
  S_IDCamera NUMBER(5,0),
  S_IDCliente NUMBER(5,0),
  S_NumeroPersone NUMBER(5,0),
  S_CostoGiornaliero NUMBER(18,2),
  PRIMARY KEY (S_DataInizio,S_IDCamera),
  FOREIGN KEY (S_IDCamera) REFERENCES CAMERA (C_IDCamera),
  FOREIGN KEY (S_IDCliente) REFERENCES CLIENTE (C_IDCliente)
);

CREATE TABLE OCCUPAZIONE
  (O_Data DATE,
  O_NumCamereOccupate NUMBER(5,0),
  O_NumeroPersonePresenti NUMBER(5,0),
  O_Incasso NUMBER(18,2),
  PRIMARY KEY (O_Data)
);

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create or replace procedure StatHotel(vDataInizio date, vDataFine date) is

cursor curSoggiorni(vData date) is
  Select count(*) AS NumCamere, sum(S_NumeroPersone) AS NumPersoneTot,
sum(S_CostoGiornaliero) AS CostoTot
  from Soggiorno
  where S_DataFine>vData and S_DataInizio<=vData;

vDate date;
vNumDays number(3);
vIt number(3);

begin
--cancello eventuali tuple precedenti
delete Occupazione where O_Data>=vDataInizio and O_Data<=vDataFine;

--per ogni data dell'intervallo
vNumDays:=vDataFine-vDataInizio;
for vIt in 0..vNumDays loop
--scorro i soggiorni
  vDate:=vDataInizio+vIt;
  for vSog in curSoggiorni(vDate) loop
    INSERT INTO Occupazione VALUES (vDate, vSog.NumCamere, vSog.NumPersoneTot,
vSog.CostoTot);

--stampo le statistiche
dbms_output.put_line(vDate ||' : camere occupate ' || vSog.NumCamere ||', ospiti
' || vSog.NumPersoneTot ||', ricavo ' || vSog.CostoTot);

    end loop;
  end loop;

end;
dbms_output.put_line(vDate ||' : camere occupate ' || vSog.NumCamere ||', ospiti
' || vSog.NumPersoneTot ||', ricavo ' || vSog.CostoTot);

    end loop;
  end loop;

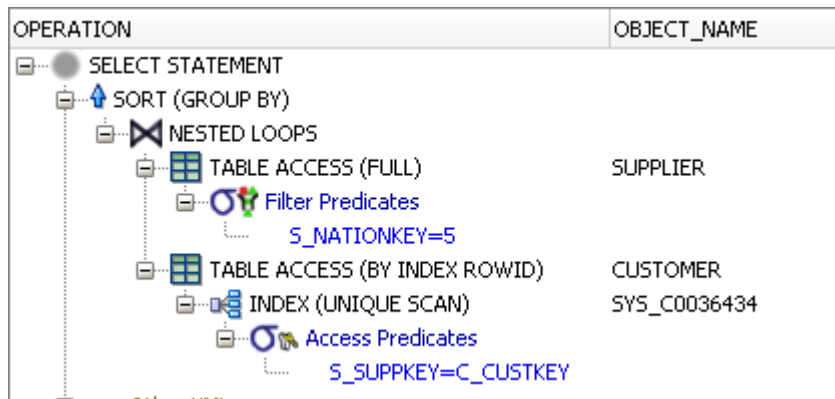
end;

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select C_MKTSEGMENT, sum(C_ACCTBAL)
from TPCD.SUPPLIER,TPCD.CUSTOMER
where S_SUPPKEY=C_CUSTKEY and S_NATIONKEY = 5
group by C_MKTSEGMENT;

```



$$NP_{SUPPLIER} = \lceil 10.000 \times 144 / (4096 \times 0,69) \rceil = 510$$

$$NP_{CUSTOMER} = \lceil 150.000 \times 159 / (4096 \times 0,69) \rceil = 8.439$$

$$Sel(S\_NATIONKEY = 5) = 1/25$$

$$NL_{C\_CUSTKEY} = \lceil (150.000 \times 4 + 150.000 \times 4) / (4096 \times 0,69) \rceil = 425$$

$$\text{Costo di accesso con indice a CUSTOMER} = 1 + \lceil 1/150.000 * 425 \rceil + \lceil 1/150.000 * 8439 \rceil = 3$$

$$\text{Costo NL} = 510 + 10.000 \times 1/25 \times 3 = 510 + 1.200 = 1.710$$

$$NP_{S-C} = \lceil 150.000 \times 1/25 \times (144+159) / (4096 \times 0,69) \rceil = 644$$

$$\text{Costo del group by} = 2 \times 644 \times (\lceil \log_{100} 644 \rceil + 1) = 2 \times 644 \times (2+1) = 3.864$$

$$\text{Costo Totale} = 1.710 + 3.864 = \mathbf{5.574}$$