1.write a query about to display department\_name,no\_of\_employees

departments having 20 or more employees?

SQL> Select department\_name,count(employee\_id)

2 From departments,employees

3 Where departments.department\_id = employees.department\_id

4 group by department\_name

5 having count(employee\_id)>=20;

DEPARTMENT\_NAME COUNT(EMPLOYEE\_ID)

------------------------------ ------------------

Shipping 45

Sales 34

2.write a query to display employee\_id,first\_name,last\_name,salary from employees

whose salary greater than average salary of the own departments?

SQL> select employee\_id,first\_name,last\_name,salary

2 from employees e1

3 where salary>(select avg(salary)

4 from employees e2

5 where

6 e1.department\_id=e2.department\_id

7 group by e1.department\_id);

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME SALARY

----------- -------------------- ------------------------- ----------

100 Steven King 24000

103 Alexander Hunold 9000

104 Bruce Ernst 6000

108 Nancy Greenberg 12008

109 Daniel Faviet 9000

114 Den Raphaely 11000

120 Matthew Weiss 8000

121 Adam Fripp 8200

122 Payam Kaufling 7900

123 Shanta Vollman 6500

124 Kevin Mourgos 5800

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME SALARY

----------- -------------------- ------------------------- ----------

137 Renske Ladwig 3600

141 Trenna Rajs 3500

145 John Russell 14000

146 Karen Partners 13500

147 Alberto Errazuriz 12000

148 Gerald Cambrault 11000

149 Eleni Zlotkey 10500

150 Peter Tucker 10000

151 David Bernstein 9500

152 Peter Hall 9000

156 Janette King 10000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME SALARY

----------- -------------------- ------------------------- ----------

157 Patrick Sully 9500

158 Allan McEwen 9000

162 Clara Vishney 10500

163 Danielle Greene 9500

168 Lisa Ozer 11500

169 Harrison Bloom 10000

170 Tayler Fox 9600

174 Ellen Abel 11000

184 Nandita Sarchand 4200

185 Alexis Bull 4100

188 Kelly Chung 3800

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME SALARY

----------- -------------------- ------------------------- ----------

189 Jennifer Dilly 3600

192 Sarah Bell 4000

193 Britney Everett 3900

201 Michael Hartstein 13000

205 Shelley Higgins 12008

38 rows selected.

3.write a query to display employee\_id,first\_name,last\_name,salary,new\_salary(salary\*10%),difference(new\_salary)?

SQL> select employee\_id,first\_name,last\_name,

2 first\_name ||''||last\_name as full\_name,salary,

3 salary \* 0.1 as newsalary,(salary\*salary\*0.1) as difference

4 from employees;

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

100 Steven King

StevenKing 24000 2400 57600000

101 Neena Kochhar

NeenaKochhar 17000 1700 28900000

102 Lex De Haan

LexDe Haan 17000 1700 28900000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

103 Alexander Hunold

AlexanderHunold 9000 900 8100000

104 Bruce Ernst

BruceErnst 6000 600 3600000

105 David Austin

DavidAustin 4800 480 2304000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

106 Valli Pataballa

ValliPataballa 4800 480 2304000

107 Diana Lorentz

DianaLorentz 4200 420 1764000

108 Nancy Greenberg

NancyGreenberg 12008 1200.8 14419206.4

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

109 Daniel Faviet

DanielFaviet 9000 900 8100000

110 John Chen

JohnChen 8200 820 6724000

111 Ismael Sciarra

IsmaelSciarra 7700 770 5929000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

112 Jose Manuel Urman

Jose ManuelUrman 7800 780 6084000

113 Luis Popp

LuisPopp 6900 690 4761000

114 Den Raphaely

DenRaphaely 11000 1100 12100000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

115 Alexander Khoo

AlexanderKhoo 3100 310 961000

116 Shelli Baida

ShelliBaida 2900 290 841000

117 Sigal Tobias

SigalTobias 2800 280 784000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

118 Guy Himuro

GuyHimuro 2600 260 676000

119 Karen Colmenares

KarenColmenares 2500 250 625000

120 Matthew Weiss

MatthewWeiss 8000 800 6400000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

121 Adam Fripp

AdamFripp 8200 820 6724000

122 Payam Kaufling

PayamKaufling 7900 790 6241000

123 Shanta Vollman

ShantaVollman 6500 650 4225000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

124 Kevin Mourgos

KevinMourgos 5800 580 3364000

125 Julia Nayer

JuliaNayer 3200 320 1024000

126 Irene Mikkilineni

IreneMikkilineni 2700 270 729000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

127 James Landry

JamesLandry 2400 240 576000

128 Steven Markle

StevenMarkle 2200 220 484000

129 Laura Bissot

LauraBissot 3300 330 1089000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

130 Mozhe Atkinson

MozheAtkinson 2800 280 784000

131 James Marlow

JamesMarlow 2500 250 625000

132 TJ Olson

TJOlson 2100 210 441000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

133 Jason Mallin

JasonMallin 3300 330 1089000

134 Michael Rogers

MichaelRogers 2900 290 841000

135 Ki Gee

KiGee 2400 240 576000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

136 Hazel Philtanker

HazelPhiltanker 2200 220 484000

137 Renske Ladwig

RenskeLadwig 3600 360 1296000

138 Stephen Stiles

StephenStiles 3200 320 1024000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

139 John Seo

JohnSeo 2700 270 729000

140 Joshua Patel

JoshuaPatel 2500 250 625000

141 Trenna Rajs

TrennaRajs 3500 350 1225000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

142 Curtis Davies

CurtisDavies 3100 310 961000

143 Randall Matos

RandallMatos 2600 260 676000

144 Peter Vargas

PeterVargas 2500 250 625000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

145 John Russell

JohnRussell 14000 1400 19600000

146 Karen Partners

KarenPartners 13500 1350 18225000

147 Alberto Errazuriz

AlbertoErrazuriz 12000 1200 14400000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

148 Gerald Cambrault

GeraldCambrault 11000 1100 12100000

149 Eleni Zlotkey

EleniZlotkey 10500 1050 11025000

150 Peter Tucker

PeterTucker 10000 1000 10000000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

151 David Bernstein

DavidBernstein 9500 950 9025000

152 Peter Hall

PeterHall 9000 900 8100000

153 Christopher Olsen

ChristopherOlsen 8000 800 6400000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

154 Nanette Cambrault

NanetteCambrault 7500 750 5625000

155 Oliver Tuvault

OliverTuvault 7000 700 4900000

156 Janette King

JanetteKing 10000 1000 10000000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

157 Patrick Sully

PatrickSully 9500 950 9025000

158 Allan McEwen

AllanMcEwen 9000 900 8100000

159 Lindsey Smith

LindseySmith 8000 800 6400000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

160 Louise Doran

LouiseDoran 7500 750 5625000

161 Sarath Sewall

SarathSewall 7000 700 4900000

162 Clara Vishney

ClaraVishney 10500 1050 11025000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

163 Danielle Greene

DanielleGreene 9500 950 9025000

164 Mattea Marvins

MatteaMarvins 7200 720 5184000

165 David Lee

DavidLee 6800 680 4624000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

166 Sundar Ande

SundarAnde 6400 640 4096000

167 Amit Banda

AmitBanda 6200 620 3844000

168 Lisa Ozer

LisaOzer 11500 1150 13225000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

169 Harrison Bloom

HarrisonBloom 10000 1000 10000000

170 Tayler Fox

TaylerFox 9600 960 9216000

171 William Smith

WilliamSmith 7400 740 5476000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

172 Elizabeth Bates

ElizabethBates 7300 730 5329000

173 Sundita Kumar

SunditaKumar 6100 610 3721000

174 Ellen Abel

EllenAbel 11000 1100 12100000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

175 Alyssa Hutton

AlyssaHutton 8800 880 7744000

176 Jonathon Taylor

JonathonTaylor 8600 860 7396000

177 Jack Livingston

JackLivingston 8400 840 7056000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

178 Kimberely Grant

KimberelyGrant 7000 700 4900000

179 Charles Johnson

CharlesJohnson 6200 620 3844000

180 Winston Taylor

WinstonTaylor 3200 320 1024000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

181 Jean Fleaur

JeanFleaur 3100 310 961000

182 Martha Sullivan

MarthaSullivan 2500 250 625000

183 Girard Geoni

GirardGeoni 2800 280 784000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

184 Nandita Sarchand

NanditaSarchand 4200 420 1764000

185 Alexis Bull

AlexisBull 4100 410 1681000

186 Julia Dellinger

JuliaDellinger 3400 340 1156000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

187 Anthony Cabrio

AnthonyCabrio 3000 300 900000

188 Kelly Chung

KellyChung 3800 380 1444000

189 Jennifer Dilly

JenniferDilly 3600 360 1296000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

190 Timothy Gates

TimothyGates 2900 290 841000

191 Randall Perkins

RandallPerkins 2500 250 625000

192 Sarah Bell

SarahBell 4000 400 1600000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

193 Britney Everett

BritneyEverett 3900 390 1521000

194 Samuel McCain

SamuelMcCain 3200 320 1024000

195 Vance Jones

VanceJones 2800 280 784000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

196 Alana Walsh

AlanaWalsh 3100 310 961000

197 Kevin Feeney

KevinFeeney 3000 300 900000

198 Donald OConnell

DonaldOConnell 2600 260 676000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

199 Douglas Grant

DouglasGrant 2600 260 676000

200 Jennifer Whalen

JenniferWhalen 4400 440 1936000

201 Michael Hartstein

MichaelHartstein 13000 1300 16900000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

202 Pat Fay

PatFay 6000 600 3600000

203 Susan Mavris

SusanMavris 6500 650 4225000

204 Hermann Baer

HermannBaer 10000 1000 10000000

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME

----------- -------------------- -------------------------

FULL\_NAME SALARY NEWSALARY DIFFERENCE

--------------------------------------------- ---------- ---------- ----------

205 Shelley Higgins

ShelleyHiggins 12008 1200.8 14419206.4

206 William Gietz

WilliamGietz 8300 830 6889000

107 rows selected.

4.display employee\_id,first\_name,last\_name,manager

first\_name with president manager first\_name is null?

SQL> select e.employee\_id,e.first\_name,e.last\_name,em.first\_name as manager\_name

2 from employees e left outer join employees em

3 on e.manager\_id=em.employee\_id

4 order by employee\_id;

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME MANAGER\_NAME

----------- -------------------- ------------------------- --------------------

100 Steven King

101 Neena Kochhar Steven

102 Lex De Haan Steven

103 Alexander Hunold Lex

104 Bruce Ernst Alexander

105 David Austin Alexander

106 Valli Pataballa Alexander

107 Diana Lorentz Alexander

108 Nancy Greenberg Neena

109 Daniel Faviet Nancy

110 John Chen Nancy

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME MANAGER\_NAME

----------- -------------------- ------------------------- --------------------

111 Ismael Sciarra Nancy

112 Jose Manuel Urman Nancy

113 Luis Popp Nancy

114 Den Raphaely Steven

115 Alexander Khoo Den

116 Shelli Baida Den

117 Sigal Tobias Den

118 Guy Himuro Den

119 Karen Colmenares Den

120 Matthew Weiss Steven

121 Adam Fripp Steven

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME MANAGER\_NAME

----------- -------------------- ------------------------- --------------------

122 Payam Kaufling Steven

123 Shanta Vollman Steven

124 Kevin Mourgos Steven

125 Julia Nayer Matthew

126 Irene Mikkilineni Matthew

127 James Landry Matthew

128 Steven Markle Matthew

129 Laura Bissot Adam

130 Mozhe Atkinson Adam

131 James Marlow Adam

132 TJ Olson Adam

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME MANAGER\_NAME

----------- -------------------- ------------------------- --------------------

133 Jason Mallin Payam

134 Michael Rogers Payam

135 Ki Gee Payam

136 Hazel Philtanker Payam

137 Renske Ladwig Shanta

138 Stephen Stiles Shanta

139 John Seo Shanta

140 Joshua Patel Shanta

141 Trenna Rajs Kevin

142 Curtis Davies Kevin

143 Randall Matos Kevin

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME MANAGER\_NAME

----------- -------------------- ------------------------- --------------------

144 Peter Vargas Kevin

145 John Russell Steven

146 Karen Partners Steven

147 Alberto Errazuriz Steven

148 Gerald Cambrault Steven

149 Eleni Zlotkey Steven

150 Peter Tucker John

151 David Bernstein John

152 Peter Hall John

153 Christopher Olsen John

154 Nanette Cambrault John

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME MANAGER\_NAME

----------- -------------------- ------------------------- --------------------

155 Oliver Tuvault John

156 Janette King Karen

157 Patrick Sully Karen

158 Allan McEwen Karen

159 Lindsey Smith Karen

160 Louise Doran Karen

161 Sarath Sewall Karen

162 Clara Vishney Alberto

163 Danielle Greene Alberto

164 Mattea Marvins Alberto

165 David Lee Alberto

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME MANAGER\_NAME

----------- -------------------- ------------------------- --------------------

166 Sundar Ande Alberto

167 Amit Banda Alberto

168 Lisa Ozer Gerald

169 Harrison Bloom Gerald

170 Tayler Fox Gerald

171 William Smith Gerald

172 Elizabeth Bates Gerald

173 Sundita Kumar Gerald

174 Ellen Abel Eleni

175 Alyssa Hutton Eleni

176 Jonathon Taylor Eleni

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME MANAGER\_NAME

----------- -------------------- ------------------------- --------------------

177 Jack Livingston Eleni

178 Kimberely Grant Eleni

179 Charles Johnson Eleni

180 Winston Taylor Matthew

181 Jean Fleaur Matthew

182 Martha Sullivan Matthew

183 Girard Geoni Matthew

184 Nandita Sarchand Adam

185 Alexis Bull Adam

186 Julia Dellinger Adam

187 Anthony Cabrio Adam

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME MANAGER\_NAME

----------- -------------------- ------------------------- --------------------

188 Kelly Chung Payam

189 Jennifer Dilly Payam

190 Timothy Gates Payam

191 Randall Perkins Payam

192 Sarah Bell Shanta

193 Britney Everett Shanta

194 Samuel McCain Shanta

195 Vance Jones Shanta

196 Alana Walsh Kevin

197 Kevin Feeney Kevin

198 Donald OConnell Kevin

EMPLOYEE\_ID FIRST\_NAME LAST\_NAME MANAGER\_NAME

----------- -------------------- ------------------------- --------------------

199 Douglas Grant Kevin

200 Jennifer Whalen Neena

201 Michael Hartstein Steven

202 Pat Fay Michael

203 Susan Mavris Neena

204 Hermann Baer Neena

205 Shelley Higgins Neena

206 William Gietz Shelley

107 rows selected.

SQL>

5.display top 3 highest salary employees(employee\_id,first\_name,salary?

SQL> select employee\_id,first\_name,salary

2 from (select\*from employees

3 order by salary desc)

4 where rownum<=3

5 order by salary;

EMPLOYEE\_ID FIRST\_NAME SALARY

----------- -------------------- ----------

101 Neena 17000

102 Lex 17000

100 Steven 24000

S