**Mysql Question: Each Mysql question carry 5 marks(5\*5=25 Marks)**

**Java question: Each Java question carry 2 marks(10\*2=20 Marks**

1. Write a query to list the number of jobs available in the employees table.

Sample Table

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISSION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 0 | 90 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 17000.00 | 0.00 | 100 | 90 |

| 102 | Lex | De Haan | LDEHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 17000.00 | 0.00 | 100 | 90 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9000.00 | 0.00 | 102 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6000.00 | 0.00 | 103 | 60 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 106 | Valli | Pataballa | VPATABAL | 590.423.4560 | 1987-06-23 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4200.00 | 0.00 | 103 | 60 |

| 108 | Nancy | Greenberg | NGREENBE | 515.124.4569 | 1987-06-25 | FI\_MGR | 12000.00 | 0.00 | 101 | 100 |

| 109 | Daniel | Faviet | DFAVIET | 515.124.4169 | 1987-06-26 | FI\_ACCOUNT | 9000.00 | 0.00 | 108 | 100 |

| 110 | John | Chen | JCHEN | 515.124.4269 | 1987-06-27 | FI\_ACCOUNT | 8200.00 | 0.00 | 108 | 100 |

| 111 | Ismael | Sciarra | ISCIARRA | 515.124.4369 | 1987-06-28 | FI\_ACCOUNT | 7700.00 | 0.00 | 108 | 100 |

| 112 | Jose Manuel | Urman | JMURMAN | 515.124.4469 | 1987-06-29 | FI\_ACCOUNT | 7800.00 | 0.00 | 108 | 100 |

| 113 | Luis | Popp | LPOPP | 515.124.4567 | 1987-06-30 | FI\_ACCOUNT | 6900.00 | 0.00 | 108 | 100 |

| 114 | Den | Raphaely | DRAPHEAL | 515.127.4561 | 1987-07-01 | PU\_MAN | 11000.00 | 0.00 | 100 | 30 |

| 115 | Alexander | Khoo | AKHOO | 515.127.4562 | 1987-07-02 | PU\_CLERK | 3100.00 | 0.00 | 114 | 30 |

| 116 | Shelli | Baida | SBAIDA | 515.127.4563 | 1987-07-03 | PU\_CLERK | 2900.00 | 0.00 | 114 | 30 |

| 117 | Sigal | Tobias | STOBIAS | 515.127.4564 | 1987-07-04 | PU\_CLERK | 2800.00 | 0.00 | 114 | 30 |

| 118 | Guy | Himuro | GHIMURO | 515.127.4565 | 1987-07-05 | PU\_CLERK | 2600.00 | 0.00 | 114 | 30 |

| 119 | Karen | Colmenares | KCOLMENA | 515.127.4566 | 1987-07-06 | PU\_CLERK | 2500.00 | 0.00 | 114 | 30 |

| 120 | Matthew | Weiss | MWEISS | 650.123.1234 | 1987-07-07 | ST\_MAN | 8000.00 | 0.00 | 100 | 50 |

| 121 | Adam | Fripp | AFRIPP | 650.123.2234 | 1987-07-08 | ST\_MAN | 8200.00 | 0.00 | 100 | 50 |

| 122 | Payam | Kaufling | PKAUFLIN | 650.123.3234 | 1987-07-09 | ST\_MAN | 7900.00 | 0.00 | 100 | 50 |

| 123 | Shanta | Vollman | SVOLLMAN | 650.123.4234 | 1987-07-10 | ST\_MAN | 6500.00 | 0.00 | 100 | 50 |

| 124 | Kevin | Mourgos | KMOURGOS | 650.123.5234 | 1987-07-11 | ST\_MAN | 5800.00 | 0.00 | 100 | 50 |

| 125 | Julia | Nayer | JNAYER | 650.124.1214 | 1987-07-12 | ST\_CLERK | 3200.00 | 0.00 | 120 | 50 |

| 126 | Irene | Mikkilineni | IMIKKILI | 650.124.1224 | 1987-07-13 | ST\_CLERK | 2700.00 | 0.00 | 120 | 50 |

| 127 | James | Landry | JLANDRY | 650.124.1334 | 1987-07-14 | ST\_CLERK | 2400.00 | 0.00 | 120 | 50 |

| 128 | Steven | Markle | SMARKLE | 650.124.1434 | 1987-07-15 | ST\_CLERK | 2200.00 | 0.00 | 120 | 50 |

| 129 | Laura | Bissot | LBISSOT | 650.124.5234 | 1987-07-16 | ST\_CLERK | 3300.00 | 0.00 | 121 | 50 |

| 130 | Mozhe | Atkinson | MATKINSO | 650.124.6234 | 1987-07-17 | ST\_CLERK | 2800.00 | 0.00 | 121 | 50 |

| 131 | James | Marlow | JAMRLOW | 650.124.7234 | 1987-07-18 | ST\_CLERK | 2500.00 | 0.00 | 121 | 50 |

| 132 | TJ | Olson | TJOLSON | 650.124.8234 | 1987-07-19 | ST\_CLERK | 2100.00 | 0.00 | 121 | 50 |

| 133 | Jason | Mallin | JMALLIN | 650.127.1934 | 1987-07-20 | ST\_CLERK | 3300.00 | 0.00 | 122 | 50 |

| 134 | Michael | Rogers | MROGERS | 650.127.1834 | 1987-07-21 | ST\_CLERK | 2900.00 | 0.00 | 122 | 50 |

| 135 | Ki | Gee | KGEE | 650.127.1734 | 1987-07-22 | ST\_CLERK | 2400.00 | 0.00 | 122 | 50 |

| 136 | Hazel | Philtanker | HPHILTAN | 650.127.1634 | 1987-07-23 | ST\_CLERK | 2200.00 | 0.00 | 122 | 50 |

| 137 | Renske | Ladwig | RLADWIG | 650.121.1234 | 1987-07-24 | ST\_CLERK | 3600.00 | 0.00 | 123 | 50 |

| 138 | Stephen | Stiles | SSTILES | 650.121.2034 | 1987-07-25 | ST\_CLERK | 3200.00 | 0.00 | 123 | 50 |

| 139 | John | Seo | JSEO | 650.121.2019 | 1987-07-26 | ST\_CLERK | 2700.00 | 0.00 | 123 | 50 |

| 140 | Joshua | Patel | JPATEL | 650.121.1834 | 1987-07-27 | ST\_CLERK | 2500.00 | 0.00 | 123 | 50 |

| 141 | Trenna | Rajs | TRAJS | 650.121.8009 | 1987-07-28 | ST\_CLERK | 3500.00 | 0.00 | 124 | 50 |

| 142 | Curtis | Davies | CDAVIES | 650.121.2994 | 1987-07-29 | ST\_CLERK | 3100.00 | 0.00 | 124 | 50 |

| 143 | Randall | Matos | RMATOS | 650.121.2874 | 1987-07-30 | ST\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 144 | Peter | Vargas | PVARGAS | 650.121.2004 | 1987-07-31 | ST\_CLERK | 2500.00 | 0.00 | 124 | 50 |

| 145 | John | Russell | JRUSSEL | 011.44.1344.429268 | 1987-08-01 | SA\_MAN | 14000.00 | 0.40 | 100 | 80 |

| 146 | Karen | Partners | KPARTNER | 011.44.1344.467268 | 1987-08-02 | SA\_MAN | 13500.00 | 0.30 | 100 | 80 |

| 147 | Alberto | Errazuriz | AERRAZUR | 011.44.1344.429278 | 1987-08-03 | SA\_MAN | 12000.00 | 0.30 | 100 | 80 |

| 148 | Gerald | Cambrault | GCAMBRAU | 011.44.1344.619268 | 1987-08-04 | SA\_MAN | 11000.00 | 0.30 | 100 | 80 |

| 149 | Eleni | Zlotkey | EZLOTKEY | 011.44.1344.429018 | 1987-08-05 | SA\_MAN | 10500.00 | 0.20 | 100 | 80 |

| 150 | Peter | Tucker | PTUCKER | 011.44.1344.129268 | 1987-08-06 | SA\_REP | 10000.00 | 0.30 | 145 | 80 |

| 151 | David | Bernstein | DBERNSTE | 011.44.1344.345268 | 1987-08-07 | SA\_REP | 9500.00 | 0.25 | 145 | 80 |

| 152 | Peter | Hall | PHALL | 011.44.1344.478968 | 1987-08-08 | SA\_REP | 9000.00 | 0.25 | 145 | 80 |

| 153 | Christopher | Olsen | COLSEN | 011.44.1344.498718 | 1987-08-09 | SA\_REP | 8000.00 | 0.20 | 145 | 80 |

| 154 | Nanette | Cambrault | NCAMBRAU | 011.44.1344.987668 | 1987-08-10 | SA\_REP | 7500.00 | 0.20 | 145 | 80 |

| 155 | Oliver | Tuvault | OTUVAULT | 011.44.1344.486508 | 1987-08-11 | SA\_REP | 7000.00 | 0.15 | 145 | 80 |

| 156 | Janette | King | JKING | 011.44.1345.429268 | 1987-08-12 | SA\_REP | 10000.00 | 0.35 | 146 | 80 |

| 157 | Patrick | Sully | PSULLY | 011.44.1345.929268 | 1987-08-13 | SA\_REP | 9500.00 | 0.35 | 146 | 80 |

| 158 | Allan | McEwen | AMCEWEN | 011.44.1345.829268 | 1987-08-14 | SA\_REP | 9000.00 | 0.35 | 146 | 80 |

| 159 | Lindsey | Smith | LSMITH | 011.44.1345.729268 | 1987-08-15 | SA\_REP | 8000.00 | 0.30 | 146 | 80 |

| 160 | Louise | Doran | LDORAN | 011.44.1345.629268 | 1987-08-16 | SA\_REP | 7500.00 | 0.30 | 146 | 80 |

| 161 | Sarath | Sewall | SSEWALL | 011.44.1345.529268 | 1987-08-17 | SA\_REP | 7000.00 | 0.25 | 146 | 80 |

| 162 | Clara | Vishney | CVISHNEY | 011.44.1346.129268 | 1987-08-18 | SA\_REP | 10500.00 | 0.25 | 147 | 80 |

| 163 | Danielle | Greene | DGREENE | 011.44.1346.229268 | 1987-08-19 | SA\_REP | 9500.00 | 0.15 | 147 | 80 |

| 164 | Mattea | Marvins | MMARVINS | 011.44.1346.329268 | 1987-08-20 | SA\_REP | 7200.00 | 0.10 | 147 | 80 |

| 165 | David | Lee | DLEE | 011.44.1346.529268 | 1987-08-21 | SA\_REP | 6800.00 | 0.10 | 147 | 80 |

| 166 | Sundar | Ande | SANDE | 011.44.1346.629268 | 1987-08-22 | SA\_REP | 6400.00 | 0.10 | 147 | 80 |

| 167 | Amit | Banda | ABANDA | 011.44.1346.729268 | 1987-08-23 | SA\_REP | 6200.00 | 0.10 | 147 | 80 |

| 168 | Lisa | Ozer | LOZER | 011.44.1343.929268 | 1987-08-24 | SA\_REP | 11500.00 | 0.25 | 148 | 80 |

| 169 | Harrison | Bloom | HBLOOM | 011.44.1343.829268 | 1987-08-25 | SA\_REP | 10000.00 | 0.20 | 148 | 80 |

| 170 | Tayler | Fox | TFOX | 011.44.1343.729268 | 1987-08-26 | SA\_REP | 9600.00 | 0.20 | 148 | 80 |

| 171 | William | Smith | WSMITH | 011.44.1343.629268 | 1987-08-27 | SA\_REP | 7400.00 | 0.15 | 148 | 80 |

| 172 | Elizabeth | Bates | EBATES | 011.44.1343.529268 | 1987-08-28 | SA\_REP | 7300.00 | 0.15 | 148 | 80 |

| 173 | Sundita | Kumar | SKUMAR | 011.44.1343.329268 | 1987-08-29 | SA\_REP | 6100.00 | 0.10 | 148 | 80 |

| 174 | Ellen | Abel | EABEL | 011.44.1644.429267 | 1987-08-30 | SA\_REP | 11000.00 | 0.30 | 149 | 80 |

| 175 | Alyssa | Hutton | AHUTTON | 011.44.1644.429266 | 1987-08-31 | SA\_REP | 8800.00 | 0.25 | 149 | 80 |

| 176 | Jonathon | Taylor | JTAYLOR | 011.44.1644.429265 | 1987-09-01 | SA\_REP | 8600.00 | 0.20 | 149 | 80 |

| 177 | Jack | Livingston | JLIVINGS | 011.44.1644.429264 | 1987-09-02 | SA\_REP | 8400.00 | 0.20 | 149 | 80 |

| 178 | Kimberely | Grant | KGRANT | 011.44.1644.429263 | 1987-09-03 | SA\_REP | 7000.00 | 0.15 | 149 | 0 |

| 179 | Charles | Johnson | CJOHNSON | 011.44.1644.429262 | 1987-09-04 | SA\_REP | 6200.00 | 0.10 | 149 | 80 |

| 180 | Winston | Taylor | WTAYLOR | 650.507.9876 | 1987-09-05 | SH\_CLERK | 3200.00 | 0.00 | 120 | 50 |

| 181 | Jean | Fleaur | JFLEAUR | 650.507.9877 | 1987-09-06 | SH\_CLERK | 3100.00 | 0.00 | 120 | 50 |

| 182 | Martha | Sullivan | MSULLIVA | 650.507.9878 | 1987-09-07 | SH\_CLERK | 2500.00 | 0.00 | 120 | 50 |

| 183 | Girard | Geoni | GGEONI | 650.507.9879 | 1987-09-08 | SH\_CLERK | 2800.00 | 0.00 | 120 | 50 |

| 184 | Nandita | Sarchand | NSARCHAN | 650.509.1876 | 1987-09-09 | SH\_CLERK | 4200.00 | 0.00 | 121 | 50 |

| 185 | Alexis | Bull | ABULL | 650.509.2876 | 1987-09-10 | SH\_CLERK | 4100.00 | 0.00 | 121 | 50 |

| 186 | Julia | Dellinger | JDELLING | 650.509.3876 | 1987-09-11 | SH\_CLERK | 3400.00 | 0.00 | 121 | 50 |

| 187 | Anthony | Cabrio | ACABRIO | 650.509.4876 | 1987-09-12 | SH\_CLERK | 3000.00 | 0.00 | 121 | 50 |

| 188 | Kelly | Chung | KCHUNG | 650.505.1876 | 1987-09-13 | SH\_CLERK | 3800.00 | 0.00 | 122 | 50 |

| 189 | Jennifer | Dilly | JDILLY | 650.505.2876 | 1987-09-14 | SH\_CLERK | 3600.00 | 0.00 | 122 | 50 |

| 190 | Timothy | Gates | TGATES | 650.505.3876 | 1987-09-15 | SH\_CLERK | 2900.00 | 0.00 | 122 | 50 |

| 191 | Randall | Perkins | RPERKINS | 650.505.4876 | 1987-09-16 | SH\_CLERK | 2500.00 | 0.00 | 122 | 50 |

| 192 | Sarah | Bell | SBELL | 650.501.1876 | 1987-09-17 | SH\_CLERK | 4000.00 | 0.00 | 123 | 50 |

| 193 | Britney | Everett | BEVERETT | 650.501.2876 | 1987-09-18 | SH\_CLERK | 3900.00 | 0.00 | 123 | 50 |

| 194 | Samuel | McCain | SMCCAIN | 650.501.3876 | 1987-09-19 | SH\_CLERK | 3200.00 | 0.00 | 123 | 50 |

| 195 | Vance | Jones | VJONES | 650.501.4876 | 1987-09-20 | SH\_CLERK | 2800.00 | 0.00 | 123 | 50 |

| 196 | Alana | Walsh | AWALSH | 650.507.9811 | 1987-09-21 | SH\_CLERK | 3100.00 | 0.00 | 124 | 50 |

| 197 | Kevin | Feeney | KFEENEY | 650.507.9822 | 1987-09-22 | SH\_CLERK | 3000.00 | 0.00 | 124 | 50 |

| 198 | Donald | OConnell | DOCONNEL | 650.507.9833 | 1987-09-23 | SH\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 199 | Douglas | Grant | DGRANT | 650.507.9844 | 1987-09-24 | SH\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 200 | Jennifer | Whalen | JWHALEN | 515.123.4444 | 1987-09-25 | AD\_ASST | 4400.00 | 0.00 | 101 | 10 |

| 201 | Michael | Hartstein | MHARTSTE | 515.123.5555 | 1987-09-26 | MK\_MAN | 13000.00 | 0.00 | 100 | 20 |

| 202 | Pat | Fay | PFAY | 603.123.6666 | 1987-09-27 | MK\_REP | 6000.00 | 0.00 | 201 | 20 |

| 203 | Susan | Mavris | SMAVRIS | 515.123.7777 | 1987-09-28 | HR\_REP | 6500.00 | 0.00 | 101 | 40 |

| 204 | Hermann | Baer | HBAER | 515.123.8888 | 1987-09-29 | PR\_REP | 10000.00 | 0.00 | 101 | 70 |

| 205 | Shelley | Higgins | SHIGGINS | 515.123.8080 | 1987-09-30 | AC\_MGR | 12000.00 | 0.00 | 101 | 110 |

| 206 | William | Gietz | WGIETZ | 515.123.8181 | 1987-10-01 | AC\_ACCOUNT | 8300.00 | 0.00 | 205 | 110 |

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

**Answer :**

**SELECT COUNT(DISTINCT job\_id)**

**FROM employees;**

1. Write a query to get the average salary and number of employees working the department 90.

**Answer:**

**SELECT AVG(salary),count(\*)**

**FROM employees**

**WHERE department\_id = 90;**

1. Write a query to get the number of employees with the same job.

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISSION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 0 | 90 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 17000.00 | 0.00 | 100 | 90 |

| 102 | Lex | De Haan | LDEHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 17000.00 | 0.00 | 100 | 90 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9000.00 | 0.00 | 102 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6000.00 | 0.00 | 103 | 60 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 106 | Valli | Pataballa | VPATABAL | 590.423.4560 | 1987-06-23 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4200.00 | 0.00 | 103 | 60 |

| 108 | Nancy | Greenberg | NGREENBE | 515.124.4569 | 1987-06-25 | FI\_MGR | 12000.00 | 0.00 | 101 | 100 |

| 109 | Daniel | Faviet | DFAVIET | 515.124.4169 | 1987-06-26 | FI\_ACCOUNT | 9000.00 | 0.00 | 108 | 100 |

| 110 | John | Chen | JCHEN | 515.124.4269 | 1987-06-27 | FI\_ACCOUNT | 8200.00 | 0.00 | 108 | 100 |

| 111 | Ismael | Sciarra | ISCIARRA | 515.124.4369 | 1987-06-28 | FI\_ACCOUNT | 7700.00 | 0.00 | 108 | 100 |

| 112 | Jose Manuel | Urman | JMURMAN | 515.124.4469 | 1987-06-29 | FI\_ACCOUNT | 7800.00 | 0.00 | 108 | 100 |

| 113 | Luis | Popp | LPOPP | 515.124.4567 | 1987-06-30 | FI\_ACCOUNT | 6900.00 | 0.00 | 108 | 100 |

| 114 | Den | Raphaely | DRAPHEAL | 515.127.4561 | 1987-07-01 | PU\_MAN | 11000.00 | 0.00 | 100 | 30 |

| 115 | Alexander | Khoo | AKHOO | 515.127.4562 | 1987-07-02 | PU\_CLERK | 3100.00 | 0.00 | 114 | 30 |

| 116 | Shelli | Baida | SBAIDA | 515.127.4563 | 1987-07-03 | PU\_CLERK | 2900.00 | 0.00 | 114 | 30 |

| 117 | Sigal | Tobias | STOBIAS | 515.127.4564 | 1987-07-04 | PU\_CLERK | 2800.00 | 0.00 | 114 | 30 |

| 118 | Guy | Himuro | GHIMURO | 515.127.4565 | 1987-07-05 | PU\_CLERK | 2600.00 | 0.00 | 114 | 30 |

| 119 | Karen | Colmenares | KCOLMENA | 515.127.4566 | 1987-07-06 | PU\_CLERK | 2500.00 | 0.00 | 114 | 30 |

| 120 | Matthew | Weiss | MWEISS | 650.123.1234 | 1987-07-07 | ST\_MAN | 8000.00 | 0.00 | 100 | 50 |

| 121 | Adam | Fripp | AFRIPP | 650.123.2234 | 1987-07-08 | ST\_MAN | 8200.00 | 0.00 | 100 | 50 |

| 122 | Payam | Kaufling | PKAUFLIN | 650.123.3234 | 1987-07-09 | ST\_MAN | 7900.00 | 0.00 | 100 | 50 |

| 123 | Shanta | Vollman | SVOLLMAN | 650.123.4234 | 1987-07-10 | ST\_MAN | 6500.00 | 0.00 | 100 | 50 |

| 124 | Kevin | Mourgos | KMOURGOS | 650.123.5234 | 1987-07-11 | ST\_MAN | 5800.00 | 0.00 | 100 | 50 |

| 125 | Julia | Nayer | JNAYER | 650.124.1214 | 1987-07-12 | ST\_CLERK | 3200.00 | 0.00 | 120 | 50 |

| 126 | Irene | Mikkilineni | IMIKKILI | 650.124.1224 | 1987-07-13 | ST\_CLERK | 2700.00 | 0.00 | 120 | 50 |

| 127 | James | Landry | JLANDRY | 650.124.1334 | 1987-07-14 | ST\_CLERK | 2400.00 | 0.00 | 120 | 50 |

| 128 | Steven | Markle | SMARKLE | 650.124.1434 | 1987-07-15 | ST\_CLERK | 2200.00 | 0.00 | 120 | 50 |

| 129 | Laura | Bissot | LBISSOT | 650.124.5234 | 1987-07-16 | ST\_CLERK | 3300.00 | 0.00 | 121 | 50 |

| 130 | Mozhe | Atkinson | MATKINSO | 650.124.6234 | 1987-07-17 | ST\_CLERK | 2800.00 | 0.00 | 121 | 50 |

| 131 | James | Marlow | JAMRLOW | 650.124.7234 | 1987-07-18 | ST\_CLERK | 2500.00 | 0.00 | 121 | 50 |

| 132 | TJ | Olson | TJOLSON | 650.124.8234 | 1987-07-19 | ST\_CLERK | 2100.00 | 0.00 | 121 | 50 |

| 133 | Jason | Mallin | JMALLIN | 650.127.1934 | 1987-07-20 | ST\_CLERK | 3300.00 | 0.00 | 122 | 50 |

| 134 | Michael | Rogers | MROGERS | 650.127.1834 | 1987-07-21 | ST\_CLERK | 2900.00 | 0.00 | 122 | 50 |

| 135 | Ki | Gee | KGEE | 650.127.1734 | 1987-07-22 | ST\_CLERK | 2400.00 | 0.00 | 122 | 50 |

| 136 | Hazel | Philtanker | HPHILTAN | 650.127.1634 | 1987-07-23 | ST\_CLERK | 2200.00 | 0.00 | 122 | 50 |

| 137 | Renske | Ladwig | RLADWIG | 650.121.1234 | 1987-07-24 | ST\_CLERK | 3600.00 | 0.00 | 123 | 50 |

| 138 | Stephen | Stiles | SSTILES | 650.121.2034 | 1987-07-25 | ST\_CLERK | 3200.00 | 0.00 | 123 | 50 |

| 139 | John | Seo | JSEO | 650.121.2019 | 1987-07-26 | ST\_CLERK | 2700.00 | 0.00 | 123 | 50 |

| 140 | Joshua | Patel | JPATEL | 650.121.1834 | 1987-07-27 | ST\_CLERK | 2500.00 | 0.00 | 123 | 50 |

| 141 | Trenna | Rajs | TRAJS | 650.121.8009 | 1987-07-28 | ST\_CLERK | 3500.00 | 0.00 | 124 | 50 |

| 142 | Curtis | Davies | CDAVIES | 650.121.2994 | 1987-07-29 | ST\_CLERK | 3100.00 | 0.00 | 124 | 50 |

| 143 | Randall | Matos | RMATOS | 650.121.2874 | 1987-07-30 | ST\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 144 | Peter | Vargas | PVARGAS | 650.121.2004 | 1987-07-31 | ST\_CLERK | 2500.00 | 0.00 | 124 | 50 |

| 145 | John | Russell | JRUSSEL | 011.44.1344.429268 | 1987-08-01 | SA\_MAN | 14000.00 | 0.40 | 100 | 80 |

| 146 | Karen | Partners | KPARTNER | 011.44.1344.467268 | 1987-08-02 | SA\_MAN | 13500.00 | 0.30 | 100 | 80 |

| 147 | Alberto | Errazuriz | AERRAZUR | 011.44.1344.429278 | 1987-08-03 | SA\_MAN | 12000.00 | 0.30 | 100 | 80 |

| 148 | Gerald | Cambrault | GCAMBRAU | 011.44.1344.619268 | 1987-08-04 | SA\_MAN | 11000.00 | 0.30 | 100 | 80 |

| 149 | Eleni | Zlotkey | EZLOTKEY | 011.44.1344.429018 | 1987-08-05 | SA\_MAN | 10500.00 | 0.20 | 100 | 80 |

| 150 | Peter | Tucker | PTUCKER | 011.44.1344.129268 | 1987-08-06 | SA\_REP | 10000.00 | 0.30 | 145 | 80 |

| 151 | David | Bernstein | DBERNSTE | 011.44.1344.345268 | 1987-08-07 | SA\_REP | 9500.00 | 0.25 | 145 | 80 |

| 152 | Peter | Hall | PHALL | 011.44.1344.478968 | 1987-08-08 | SA\_REP | 9000.00 | 0.25 | 145 | 80 |

| 153 | Christopher | Olsen | COLSEN | 011.44.1344.498718 | 1987-08-09 | SA\_REP | 8000.00 | 0.20 | 145 | 80 |

| 154 | Nanette | Cambrault | NCAMBRAU | 011.44.1344.987668 | 1987-08-10 | SA\_REP | 7500.00 | 0.20 | 145 | 80 |

| 155 | Oliver | Tuvault | OTUVAULT | 011.44.1344.486508 | 1987-08-11 | SA\_REP | 7000.00 | 0.15 | 145 | 80 |

| 156 | Janette | King | JKING | 011.44.1345.429268 | 1987-08-12 | SA\_REP | 10000.00 | 0.35 | 146 | 80 |

| 157 | Patrick | Sully | PSULLY | 011.44.1345.929268 | 1987-08-13 | SA\_REP | 9500.00 | 0.35 | 146 | 80 |

| 158 | Allan | McEwen | AMCEWEN | 011.44.1345.829268 | 1987-08-14 | SA\_REP | 9000.00 | 0.35 | 146 | 80 |

| 159 | Lindsey | Smith | LSMITH | 011.44.1345.729268 | 1987-08-15 | SA\_REP | 8000.00 | 0.30 | 146 | 80 |

| 160 | Louise | Doran | LDORAN | 011.44.1345.629268 | 1987-08-16 | SA\_REP | 7500.00 | 0.30 | 146 | 80 |

| 161 | Sarath | Sewall | SSEWALL | 011.44.1345.529268 | 1987-08-17 | SA\_REP | 7000.00 | 0.25 | 146 | 80 |

| 162 | Clara | Vishney | CVISHNEY | 011.44.1346.129268 | 1987-08-18 | SA\_REP | 10500.00 | 0.25 | 147 | 80 |

| 163 | Danielle | Greene | DGREENE | 011.44.1346.229268 | 1987-08-19 | SA\_REP | 9500.00 | 0.15 | 147 | 80 |

| 164 | Mattea | Marvins | MMARVINS | 011.44.1346.329268 | 1987-08-20 | SA\_REP | 7200.00 | 0.10 | 147 | 80 |

| 165 | David | Lee | DLEE | 011.44.1346.529268 | 1987-08-21 | SA\_REP | 6800.00 | 0.10 | 147 | 80 |

| 166 | Sundar | Ande | SANDE | 011.44.1346.629268 | 1987-08-22 | SA\_REP | 6400.00 | 0.10 | 147 | 80 |

| 167 | Amit | Banda | ABANDA | 011.44.1346.729268 | 1987-08-23 | SA\_REP | 6200.00 | 0.10 | 147 | 80 |

| 168 | Lisa | Ozer | LOZER | 011.44.1343.929268 | 1987-08-24 | SA\_REP | 11500.00 | 0.25 | 148 | 80 |

| 169 | Harrison | Bloom | HBLOOM | 011.44.1343.829268 | 1987-08-25 | SA\_REP | 10000.00 | 0.20 | 148 | 80 |

| 170 | Tayler | Fox | TFOX | 011.44.1343.729268 | 1987-08-26 | SA\_REP | 9600.00 | 0.20 | 148 | 80 |

| 171 | William | Smith | WSMITH | 011.44.1343.629268 | 1987-08-27 | SA\_REP | 7400.00 | 0.15 | 148 | 80 |

| 172 | Elizabeth | Bates | EBATES | 011.44.1343.529268 | 1987-08-28 | SA\_REP | 7300.00 | 0.15 | 148 | 80 |

| 173 | Sundita | Kumar | SKUMAR | 011.44.1343.329268 | 1987-08-29 | SA\_REP | 6100.00 | 0.10 | 148 | 80 |

| 174 | Ellen | Abel | EABEL | 011.44.1644.429267 | 1987-08-30 | SA\_REP | 11000.00 | 0.30 | 149 | 80 |

| 175 | Alyssa | Hutton | AHUTTON | 011.44.1644.429266 | 1987-08-31 | SA\_REP | 8800.00 | 0.25 | 149 | 80 |

| 176 | Jonathon | Taylor | JTAYLOR | 011.44.1644.429265 | 1987-09-01 | SA\_REP | 8600.00 | 0.20 | 149 | 80 |

| 177 | Jack | Livingston | JLIVINGS | 011.44.1644.429264 | 1987-09-02 | SA\_REP | 8400.00 | 0.20 | 149 | 80 |

| 178 | Kimberely | Grant | KGRANT | 011.44.1644.429263 | 1987-09-03 | SA\_REP | 7000.00 | 0.15 | 149 | 0 |

| 179 | Charles | Johnson | CJOHNSON | 011.44.1644.429262 | 1987-09-04 | SA\_REP | 6200.00 | 0.10 | 149 | 80 |

| 180 | Winston | Taylor | WTAYLOR | 650.507.9876 | 1987-09-05 | SH\_CLERK | 3200.00 | 0.00 | 120 | 50 |

| 181 | Jean | Fleaur | JFLEAUR | 650.507.9877 | 1987-09-06 | SH\_CLERK | 3100.00 | 0.00 | 120 | 50 |

| 182 | Martha | Sullivan | MSULLIVA | 650.507.9878 | 1987-09-07 | SH\_CLERK | 2500.00 | 0.00 | 120 | 50 |

| 183 | Girard | Geoni | GGEONI | 650.507.9879 | 1987-09-08 | SH\_CLERK | 2800.00 | 0.00 | 120 | 50 |

| 184 | Nandita | Sarchand | NSARCHAN | 650.509.1876 | 1987-09-09 | SH\_CLERK | 4200.00 | 0.00 | 121 | 50 |

| 185 | Alexis | Bull | ABULL | 650.509.2876 | 1987-09-10 | SH\_CLERK | 4100.00 | 0.00 | 121 | 50 |

| 186 | Julia | Dellinger | JDELLING | 650.509.3876 | 1987-09-11 | SH\_CLERK | 3400.00 | 0.00 | 121 | 50 |

| 187 | Anthony | Cabrio | ACABRIO | 650.509.4876 | 1987-09-12 | SH\_CLERK | 3000.00 | 0.00 | 121 | 50 |

| 188 | Kelly | Chung | KCHUNG | 650.505.1876 | 1987-09-13 | SH\_CLERK | 3800.00 | 0.00 | 122 | 50 |

| 189 | Jennifer | Dilly | JDILLY | 650.505.2876 | 1987-09-14 | SH\_CLERK | 3600.00 | 0.00 | 122 | 50 |

| 190 | Timothy | Gates | TGATES | 650.505.3876 | 1987-09-15 | SH\_CLERK | 2900.00 | 0.00 | 122 | 50 |

| 191 | Randall | Perkins | RPERKINS | 650.505.4876 | 1987-09-16 | SH\_CLERK | 2500.00 | 0.00 | 122 | 50 |

| 192 | Sarah | Bell | SBELL | 650.501.1876 | 1987-09-17 | SH\_CLERK | 4000.00 | 0.00 | 123 | 50 |

| 193 | Britney | Everett | BEVERETT | 650.501.2876 | 1987-09-18 | SH\_CLERK | 3900.00 | 0.00 | 123 | 50 |

| 194 | Samuel | McCain | SMCCAIN | 650.501.3876 | 1987-09-19 | SH\_CLERK | 3200.00 | 0.00 | 123 | 50 |

| 195 | Vance | Jones | VJONES | 650.501.4876 | 1987-09-20 | SH\_CLERK | 2800.00 | 0.00 | 123 | 50 |

| 196 | Alana | Walsh | AWALSH | 650.507.9811 | 1987-09-21 | SH\_CLERK | 3100.00 | 0.00 | 124 | 50 |

| 197 | Kevin | Feeney | KFEENEY | 650.507.9822 | 1987-09-22 | SH\_CLERK | 3000.00 | 0.00 | 124 | 50 |

| 198 | Donald | OConnell | DOCONNEL | 650.507.9833 | 1987-09-23 | SH\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 199 | Douglas | Grant | DGRANT | 650.507.9844 | 1987-09-24 | SH\_CLERK | 2600.00 | 0.00 | 124 | 50 |

| 200 | Jennifer | Whalen | JWHALEN | 515.123.4444 | 1987-09-25 | AD\_ASST | 4400.00 | 0.00 | 101 | 10 |

| 201 | Michael | Hartstein | MHARTSTE | 515.123.5555 | 1987-09-26 | MK\_MAN | 13000.00 | 0.00 | 100 | 20 |

| 202 | Pat | Fay | PFAY | 603.123.6666 | 1987-09-27 | MK\_REP | 6000.00 | 0.00 | 201 | 20 |

| 203 | Susan | Mavris | SMAVRIS | 515.123.7777 | 1987-09-28 | HR\_REP | 6500.00 | 0.00 | 101 | 40 |

| 204 | Hermann | Baer | HBAER | 515.123.8888 | 1987-09-29 | PR\_REP | 10000.00 | 0.00 | 101 | 70 |

| 205 | Shelley | Higgins | SHIGGINS | 515.123.8080 | 1987-09-30 | AC\_MGR | 12000.00 | 0.00 | 101 | 110 |

| 206 | William | Gietz | WGIETZ | 515.123.8181 | 1987-10-01 | AC\_ACCOUNT | 8300.00 | 0.00 | 205 | 110 |

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**Answer:**

**SELECT job\_id, COUNT(\*)**

**FROM employees GROUP BY job\_id;**

1. Write a query to update the portion of the phone\_number in the employees table, within the phone number the substring '124' will be replaced by '999'.

**Answer:**

**UPDATE employees**

**SET phone\_number = REPLACE(phone\_number, '124', '999')**

**WHERE phone\_number LIKE '%124%';**

1. Write a query to find the addresses (location\_id, street\_address, city, state\_province, country\_name) of all the departments.

**Sample table: locations**

location\_id street\_address postal\_code city state\_province country\_id

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1000 1297 Via Cola di Rie 989 Roma IT

1100 93091 Calle della Te 10934 Venice IT

1200 2017 Shinjuku-ku 1689 Tokyo Tokyo Prefectu JP

1300 9450 Kamiya-cho 6823 Hiroshima JP

1400 2014 Jabberwocky Rd 26192 Southlake Texas US

1500 2011 Interiors Blvd 99236 South San California US

1600 2007 Zagora St 50090 South Brun New Jersey US

1700 2004 Charade Rd 98199 Seattle Washington US

1800 147 Spadina Ave M5V 2L7 Toronto Ontario CA

1900 6092 Boxwood St YSW 9T2 Whitehorse Yukon CA

2000 40-5-12 Laogianggen 190518 Beijing CN

2100 1298 Vileparle (E) 490231 Bombay Maharashtra IN

2200 12-98 Victoria Stree 2901 Sydney New South Wale AU

2300 198 Clementi North 540198 Singapore SG

2400 8204 Arthur St London UK

2500 Magdalen Centre, The OX9 9ZB Oxford Oxford UK

2600 9702 Chester Road 9629850293 Stretford Manchester UK

2700 Schwanthalerstr. 703 80925 Munich Bavaria DE

2800 Rua Frei Caneca 1360 01307-002 Sao Paulo Sao Paulo BR

2900 20 Rue des Corps-Sai 1730 Geneva Geneve CH

3000 Murtenstrasse 921 3095 Bern BE CH

3100 Pieter Breughelstraa 3029SK Utrecht Utrecht NL

3200 Mariano Escobedo 999 11932 Mexico Cit Distrito Feder MX

**Sample table: countries**

country\_id country\_name region\_id

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

country\_id country\_name region\_id

AR Argentina 2

AU Australia 3

BE Belgium 1

BR Brazil 2

CA Canada 2

CH Switzerland 1

CN China 3

DE Germany 1

DK Denmark 1

EG Egypt 4

FR France 1

HK HongKong 3

IL Israel 4

IN India 3

IT Italy 1

JP Japan 3

KW Kuwait 4

MX Mexico 2

NG Nigeria 4

NL Netherlands 1

SG Singapore 3

UK United Kingd 1

US United State 2

ZM Zambia 4

ZW Zimbabwe 4

**Answer:**

**SELECT location\_id, street\_address, city, state\_province, country\_name**

**FROM locations**

**NATURAL JOIN countries;**

**===================================================================================================================================**

**Java Questions:**

**1.**

Carefully read the question and answer accordingly.  
State whether TRUE or FALSE.  
The below code will compile & provide desired output:   
package p1;  
interface A {  
 public abstract void methodOne();  
}  
interface B{  
 public abstract void methodTwo();  
}  
interface C{  
 public abstract void methodTwo();  
}  
class D implements B,C,A{  
 public void methodOne(){}  
 public void methodTwo(){ System.out.println("Method Two");}  
}  
class Test {  
 public static void main(String[] args) {  
 new D().methodTwo();  
 }  
}

**Options : True**

**False**

**Answer :True.**

**2**. Carefully read the question and answer accordingly.  
What will be the output of following code?  
class InterfaceDemo  
{  
 public static void main(String [] args)  
 {  
 new DigiCam(){}.doCharge();  
 new DigiCam(){  
 public void writeData (String msg)   
 {  
 System.out.println("You are Sending: "+msg);   
 }  
 }.writeData("MyFamily.jpg");  
 }//main  
}  
interface USB  
{  
 int readData();  
 void writeData(String input);  
 void doCharge();  
}  
abstract class DigiCam implements USB  
{  
 public int readData(){ return 0;}  
 public void writeData(String input){}  
 public void doCharge()  
 {  
 System.out.println("DigiCam do Charge");  
 }  
}

**Option**

**A. Compiler Error**

**B.DigiCam do Charge**

**You are Sending: MyFamily.jpg**

**C. Runtime Error**

**D. You are Sending : MyFamily.jpg**

**Answer B.**

**3.** Carefully read the question and answer accordingly.  
What will be the output for following code?  
public class Variables  
{  
 public static void main(String[]args)  
 {  
 public int i=10;  
 System.out.println(i++);  
 }  
}

**Option:**

1. **10**
2. **11**
3. **Compilation Errors**
4. **None of these**

4. Carefully read the question and answer accordingly.  
public abstract class Shape   
{  
 private int x;  
 private int y;  
 public abstract void draw();  
 public void setAnchor(int x, int y)   
 {  
 this.x = x;  
 this.y = y;  
 }  
 }  
Which two classes use the Shape class correctly?   
1.public class Circle implements Shape {  
private int radius;  
}  
2.public abstract class Circle extends Shape {  
private int radius;  
}  
3.public class Circle extends Shape {  
private int radius;  
public void draw();  
}  
4.public class Circle extends Shape {  
private int radius;  
public void draw() {/\* code here \*/}  
}

**Option:**

1. **1&2**
2. **1&3**
3. **2&3**
4. **3&4**
5. **2&4**

**Answer:**

**E**

5. Carefully read the question and answer accordingly.  
What is the outputof below code:  
package p1;  
class Parent {  
 public static void doWork() {  
 System.out.println("Parent");  
 }  
}  
class Child extends Parent {  
 public static void doWork() {  
 System.out.println("Child");  
 }  
}  
class Test {  
 public static void main(String[] args) {  
 Child.doWork();  
 }  
}

Options/;

1. Child Parent
2. Parent
3. Child
4. Parent Child

**Answer C.**

**6.** Carefully read the question and answer accordingly.  
State whether TRUE or FALSE.  
The below code will compile & provide desired output:  
package p1;  
interface Bounceable {  
 void bounce();  
 void setBounceFactor(int bf);  
 private class BusinessLogic  
 {  
 int var1;  
 float var2;  
 double result(int var1,float var2){  
 return var1\*var2;  
 }  
 }  
}  
class Test {  
 public static void main(String[] args) {  
 System.out.println(new Bounceable.BusinessLogic().result(12,12345.22F));  
 }  
}

**Options:**

**True**

**False**

**7.**

Carefully read the question and answer accordingly.  
What will be the output for following code  
public class  
MethodOverloading {  
int m=10,n;  
public void div(int a) throws Exception{  
n=m/a;  
System.out.println(n);  
}  
public void div(int a,int b) {  
n=a/b;  
}  
public static void main(String[]args) throws Exception{  
MethodOverloading o=new MethodOverloading();  
o.div(0);  
o.div(10,2);  
}  
}

**Options:**

1. **It will print ArithmeticException and prints 5**
2. **It will give ArithmeticException**
3. **It will print 5**
4. **None of the listed options**

**Answer:**

**B.**

**8.** Carefully read the question and answer accordingly.  
State whether TRUE or FALSE.  
Interface can be used when common functionalities have to be implemented differently across multiple classes.

**Options:**

**True**

**False**

**Answer**

**True**

**9.** Carefully read the question and answer accordingly.  
What is the outputof below code:  
package p1;  
abstract class LivingThings{  
 public abstract int walk();  
}  
class Human extends LivingThings{  
 @Override  
 public void walk() {  
 System.out.println("Human Can Walk");  
 }  
}  
class Test {  
 public static void main(String[] args) {  
 new Human().walk();  
 }  
}

**Options:**

1. **Human Can Walk**
2. **Compilation Error**
3. **Runtime Exception**
4. **No Output will be displayed**

**Answer:**

**B.**

**10.** Carefully read the question and answer accordingly.  
What will be the output for following code?  
public class VariableDec   
{  
 public static void main(String[]args)  
 {  
 int x = 1;  
 if(x>0 )  
 x = 3;  
 switch(x)   
 {  
 case 1: System.out.println(1);  
 case 0: System.out.println(0);  
 case 2: System.out.println(2);  
 break;  
 case 3: System.out.println(3);  
 default: System.out.println(4);  
 break;  
 }  
 }  
}

**Options:**

1. **1 0 2**
2. **3**

**4**

1. **4**
2. **Compilation error**

**Answer: B.**