```
Ans1)[
 {
  $group: {
    _id: "$role",
   avgsal:{$avg:"$salary"}
 }
]
Ans2) [
  $group: {
   _id: "$city",
   numberofusers:{$sum:1}
Ans3)[
  $group: {
   _id: "$gender",
   avgage:{$avg:"$age"}
]
Ans4) [
 {
  $group: {
   _id:{role:"$role",city:"$city"},
   totalsalary:{$sum:"$salary"}
}
]
Ans5) [
 {
  $group: {
   _id:{gender:"$gender",city:"$city"},
   maxsalary:{$max:"$salary"}
```

```
Ans6)[
  $unwind: "$skills"
  $group: {
   _id:"$skills",
   countofusers:{$sum:1}
}
Ans7) [
  $group: {
   _id:"$role",
   minage:{$min:"$age"}
  }
Ans8) [
  $group: {
   _id:{gender:"$gender",city:"$city"},
   avgsalary:{$avg:"$salary"}
]
Ans9) [
  $group: {
   _id: "$role",
   cities:{$addToSet:"$city"}
 }
}]
```

```
Ans10) [
 $group: {
  _id: "$age",
  numberofusers:{$sum:1}
 }
}]
Ans11) [
  $addFields: {
   numberofskills:{$size:"$skills"}
 },
  $group: {
  _id: "$city",
  avgskillcount:{$avg:"$numberofskills"}
 }
}]
Ans12) [
 $group: {
  _id: "$role",
  highestsalary:{$max:"$salary"}
 }
}]
Ans13) [
 $group: {
  _id: "$gender",
  numberofusers:{$sum:1}
 }
}]
Ans14) [
```

```
$group: {
  _id: "$city",
  avgage:{$avg:"$age"}
 }
}]
Ans15) [
 $group: {
  _id: {role:"$role",gender:"$gender"},
  avgsalary:{$avg:"$salary"}
 }
}]
Ans16) [
  $unwind: "$skills"
},
 $group: {
  _id:"$skills",
  numberofusers:{$sum:1}
 }
}]
Ans17) [
 $group: {
  _id:"$age",
  maxsal:{$max:"$salary"}
 }
}]
Ans18) [
  $addFields: {
```

```
numberofskills: {$size:"$skills"}
  }
 }
 $match: {
    numberofskills:{"$gt":3}
 }
},
  $group: {
   _id: "$role",
   numberofusers:{$sum:1}
]
Ans19) [
  $addFields: {
    numberofskills:{$size:"$skills"}
 },
  $group: {
   _id: {city:"$city",gender:"$gender"}
  avgskillcount:{$avg:"$numberofskills"}
 }
}]
Ans20) [
 {
  $group: {
    _id: "$role",
    maxsal:{$max:"$salary"},
    minsal:{$min:"$salary"}
]
Ans21) [
 {
   $group: {
    _id:{city: "$city",role:"$role"},
```

```
avgnumber:{$avg:1}
  }
Ans22) [
  $group: {
    _id:{gender: "$gender",role:"$role"},
   avgsalary:{$avg:"$salary"}
 }
Ans23) [
 {
  $match: {
    salary:{$gt:1000000}
 },
  $group: {
    _id:"$age",
   numberofusers:{$sum:1}
 }}
]
Ans24) [
  $unwind: "$skills"
 },
  $group: {
    _id:"$skills",
   avgsalary:{$avg:"$salary"}
 }}
]
Ans25) [
  $group: {
    \_id: \{role: "\$role", city: "\$city"\},
    avgage:{$avg:"$age"}
```

```
}}
]
Ans26) [
  $match: {
   skills:"Java"
},
  $group: {
    _id:"$gender",
   numberofusers:{$sum:1}
}}
]
Ans27) [
  $addFields: {
   numberofskills: {$size:"$skills"}
}},
  $group: {
    _id:"$city",
   maximumskillcount:{$max:"$numberofskills"}
}}
Ans28) [
  $match: {
   skills:"Python"
},
  $group: {
    _id:"$role",
   countofusers:{$sum:1}
}}
```

```
Ans29) [
 {
  $addFields: {
   numberofskills:{$size:"$skills"}
 }
,{
  $match: {
     numberofskills:{$gt:2}
}
 ,{
  $group: {
   _id: {gender:"$gender",city:"$city"},
   avgsal:{$avg:"$salary"}
       }
}
]
Ans30) [{
 $group: {
  _id: "$age",
 countofusers:{$sum:1}
}]
Ans31) [
  $match: {
   role:"customer",
   city:"Mumbai"
 },{
 $group: {
  _id: "$role",
 totalsalary:{$sum:"$salary"}
}]
Ans32) [
 {
  $match: {
   role:"admin"
  }
```

```
},{
 $group: {
  _id: "$city",
 maxsalary:{$max:"$salary"}
}]
Ans33) [
 {
  $match: {
   salary:{$gt:500000}
 },{
 $group: {
  _id: "$gender",
  numberofusers:{$sum:1}
}]
Ans34) [
 {
  $unwind: "$skills"
 },
  $group: {
    _id:"$skills",
   avgage:{$avg:"$age"}
 }}
]
Ans35) [{
 $addFields: {
  numberofskills:{\$size:\$skills\}
}}
, {
 $match: {
  salary:{$lt:700000}
},
  $group: {
   _id:"$role",
   avgskillcount:{$avg:"$numberofskills"}
 }}
```

```
]
Ans36) [ {
 $match: {
  skills:"Python"
 }
},
 {
  $group: {
    _id:{city:"$city",gender:"$gender"},
   avgsalary:{$avg:"$salary"}
 }}
]
Ans37) [ {
 $match: {
  role:"admin"
 }
},
  $group: {
    _id:"$age",
   numberofusers:{$sum:1}
}}
]
Ans38) [ {
 $match: {
  skills:"C++"
 }
},
  $group: {
    _id:{role:"$role",city:"$city"},
   numberofusers:{$sum:1}
 }}
]
Ans39)
Ans40) [
  $unwind: "$skills"
 },
```

```
$group: {
    _id:"$skills",
    maxage:{$max:"$age"}
}}
]
Ans41) [
 {
  $addFields: {
    numberofskills:{$size:"$skills"}
 }
 ,{
  $match: {
     numberofskills:{$gt:1}
}
  $group: {
    _id: {role:"$role",city:"$city"},
   countofusers:{$sum:1}
       }
 }
Ans42) [
  $match: {
    salary:{$lt:500000}
}
  $group: {
    _id: {gender:"$gender",city:"$city"},
   countofusers:{$sum:1}
 }
]
Ans43) [
 {
  $match: {
    role:"customer"
```

```
$group: {
   _id: "$age",
   avgsalary:{$avg:"$salary"}
}
]
Ans44) [
 {
 $match: {
    skills:"Kotlin"
 }
}
  $group: {
   _id: "$role",
   avgsalary:{$avg:"$salary"}
 }
]
Ans45) [
 $match: {
    role:"admin"
  $group: {
   _id: "$city",
   countofusers:{$sum:1}
}
]
Ans46) [
 $match: {
    skills:{$all:["Java","Python"]}
}
```

```
$group: {
   _id: "$gender",
   countofusers:{$sum:1}
]
Ans47) [
 $match: {
   role:"customer"}
  $group: {
   _id: "$age",
   countofusers:{$sum:1}
 }
Ans48) [
 $match: {
   skills:"DBMS"}
}
  $group: {
   _id: {role:"$role",city:"$city"},
   countofusers:{$sum:1}
 }
Ans49) [
  $addFields: {
   numberofskills:{$size:"$skills"}
  $match: {
    numberofskills:{$gt:3}
 }
```

```
}
 ,{
  $group: {
   _id: "$gender",
   countofusers:{$sum:1}
 }
]
Ans50) [
  $addFields: {
   numberofskills:{$size:"$skills"}
 ,{
  $match: {
     numberofskills:{$gt:3}
  $group: {
   _id: "$gender",
   countofusers:{$sum:1}
 }
]
Ans51) [
 $match: {
   role:"admin"
  $group: {
   _id: "$age",
   maxsalary:{$max:"$salary"}
       }
Ans52) [
 {
```

```
$match: {
    skills:"JavaScript"
}
 ,{
  $group: {
    _id: {role:"$role",city:"$city"},
   totalsalary:{$sum:"$salary"}
 }
]
Ans53) [
  $match: {
    role:"customer"
}
 ,{
  $group: {
    _id:"$gender",
    avgsalary:{$avg:"$salary"}
 }
Ans54) [
 {
  $match: {
    skills:"React"
  }
}
  $group: {
    _id:"$city",
   countofusers:{$sum:1}
 }
]
Ans55) [
  $match: {
    skills:"SQL"
```

```
$group: {
   _id:"$age",
   avgsalary:{$avg:"$salary"}
}
Ans56) [
 {
 $match: {
   skills:"Django"
}
  $group: {
   _id:"$role",
   countofusers:{$sum:1}
}
]
Ans57) [
  $addFields: {
   numberofskills:{$size:"$skills"}
 }
  $group: {
   _id: "$gender",
   maxskillcount:{$max:"$numberofskills"}
      }
}
Ans58) [
  $match: {
   skills:"Node.js"
```

```
}
  $group: {
    _id: "$city",
  countofusers:{$sum:1}
 }
]
Ans59) [
 {
  $match: {
    skills:{$all:["HTML","CSS"]}
}
  $group: {
    _id: "$age",
    countofusers:{$sum:1}
 }
]
Ans60) [
  $addFields: {
    numberofskills:{$size:"$skills"}
  $match: {
    salary:{$gt:1000000}
  $group: {
    _id: {gender:"$gender",role:"$role"},
   avgskillcount:{$avg:"$numberofskills"}
 }
```