```sas
proc sort data=cr.employee_current out=emp_sort;
    by Department Salary;
run;

data dept_salary;
    set emp_sort;
    retain LowSalaryJob;
    by Department;
    if first.Department then do;
        TotalDeptSalary=0;
        LowSalaryJob=JobTitle;
    end;
    TotalDeptSalary+Salary;
    if last.department then do;
        HighSalaryJob=JobTitle;
        output;
    end;
    keep Department TotalDeptSalary HighSalaryJob LowSalaryJob;
    format TotalDeptSalary dollar12.;
run;

/* Programming exercise -7 */
data fish;
    set sashelp.fish;
    Length=round(mean(of L:), .01);
run;

proc means data=fish mean maxdec=2;
    var Length;
    class Species;
run;

/* Programming Exercise -8 */
data outfield;
    set sashelp.baseball;
    where substr(Position, 2, 1)="F";
    Player=catx(" ", scan(Name, 2), scan(Name, 1));
    BatAvg=round(nHits/nAtBat, .001);
    keep Player BatAvg Position;
run;

proc sort data=outfield;
    by descending BatAvg;
run;


/* Programming Exercise -9 */
data emp_new;
      set cr.employee_new(rename=(HireDate=HireDateC));
      EmpID=substr(EmpID,4);

```

```
53        HireDate=input(HireDateC, anydtdte10.);
54        Salary=input(AnnualSalary, dollar10.);
55        drop HireDateC;
56  run;
57
58
59
60  /* Programming Exercise-10 */
61  proc format;
62      value bmirange low-<18.5="Underweight"
63                     18.5-24.9="Normal"
64                     25-29.9="Overweight"
65                     30-high="Obese";
66  run;
67
68  proc freq data=sashelp.bmimen;
69      where age>=21;
70      tables bmi;
71      format bmi bmirange.;
72  run;
73
74  /* Programming Exercise-11 */
75  data continentfmt;
76      set cr.continent_codes;
77      retain fmtname "contfmt";
78      Start=Code;
79      Label=Continent;
80  run;
81
82  proc format cntlin=continentfmt;
83  run;
84
85  proc means data=cr.demographics sum maxdec=0;
86      var pop;
87      class cont;
88      format cont contfmt.;
89  run;
90
91  /* Programming Exercise-12 */
92  proc format;
93      value $statfmt "S"="Single"
94                     "M"="Married"
95                     "O"="Other";
96      value salrange low-<50000="Under $50K"
97                     50000-100000="50K-100K"
98                     100000<-high="Over 100K";
99  run;
100
101 proc freq data=cr.employee;
102     tables Status;
103     tables City*Salary / nopercent nocol;
104
105
```

```
    format Status $statfmt. Salary salrange.;
run;
/* value salrange low-<50000="Under $50K" */
/*                   50000-100000="50K-100K" */
/*                   100000<-high="Over 100K"; */
```