

```
1  /* Programming Exercise-1 */
2  data holiday2019;
3      set sashelp.holiday;
4      where end=. and rule=0;
5      CountryCode=substr(category,4,2);
6      Date=mdy(month, day, 2019);
7      keep Desc CountryCode Date;
8  run;
9
10 /* Programming Exercise -2 */
11 data sales;
12     set cr.employee;
13     length SalesLevel $ 6;
14     where Department="Sales" and TermDate is missing;
15     Country=upcase(Country);
16     if substr(JobTitle, 12)="I" then SalesLevel="Entry";
17     else if substr(JobTitle, 12) in("II" "III") then
18         SalesLevel="Middle";
19     else if substr(JobTitle, 12)="IV" then SalesLevel="Senior";
20 run;
21
22
23 proc freq data=sales;
24     tables SalesLevel;
25 run;
26
27 /* Programming Exercise 3 */
28 data bonus;
29     set cr.employee;
30     where TermDate is missing;
31     YearsEmp=yrdif(HireDate, "01JAN2019"d, "age");
32     if YearsEmp >= 10 then do;
33         Bonus=Salary*.03;
34         Vacation=20;
35     end;
36     else do;
37         Bonus=Salary*.02;
38         Vacation=15;
39     end;
40 run;
41
42 proc freq data=bonus;
43     tables Vacation;
44 run;
45
46 proc sort data=bonus;
47     by descending YearsEmp;
```