```sas
* Programmed by Charles Hwang *
* Coded in SAS OnDemand       *
* Tuesday, March 19, 2019     *
* Course: STAT 303            *
* Title: Homework 3           *;
/* 1 */ Data Adoptions;
Infile "/home/chwang10/sasuser.v94/adoption.txt";
Length Country$ 12;
Input Country$ Year Adoptions;

/* 1a */ Proc Gchart data=Adoptions;
Hbar Year /sumvar=Adoptions discrete type=sum;

/* 1b */ Data Adoptions1;
Set Adoptions;
Where Country="China" or Country="Russia" or Country="Guatemala" or Country="Ethiopia";
Data Adoptions2;
Set Adoptions;
Where Country="South_Korea" or Country="Colombia" or Country="Ukraine" or Country="Haiti" or Country="Vietnam";
Proc Gchart data=Adoptions1;
Vbar Year /group=Country sumvar=Adoptions discrete type=sum;
Proc Gchart data=Adoptions2;
Vbar Year /group=Country sumvar=Adoptions discrete type=sum;

/* 1c */ Proc Gchart data=Adoptions;
Title "Total Adoptions by Country";
Pie Country /sumvar=Adoptions other=0;

/* 1d */ Proc Sort data=Adoptions1;
By Year;
Symbol1 value=circle color=blue I=join;
Symbol2 value=square color=red I=join;
Symbol3 value=triangle color=yellow I=join;
Symbol4 value=diamond color=green I=join;
Proc gplot data=Adoptions1;
Plot Adoptions*Year=Country;

/* 1e */ * (1) International adoptions appears to have decreased over the past 11 years. (Wikipedia)
(2) Ethiopia may have had an increase in birth rate to cause the increase in international
adoptions from 2003 to 2010. (Wikipedia)
(3) Guatemala and Russia have seen international adoption decrease to almost zero, partially due
to industrialization. (Wikipedia) ;

/* 2a */ Proc Import datafile="/home/chwang10/sasuser.v94/Parole.xlsx" out=Parole dbms=xlsx replace;
Getnames=Yes;

/* 2b */ Proc Freq data=Parole order=freq;
* 85.42 percent of the parolees had no or few punishment records while in prison ("Record" table). ;

/* 2c */ Proc Freq;
Tables Violations*Record;
Title "Violations vs. Record";
* (i) 4.92 percent of the parolees had many punishments while in prison and have violated their parolee.
(ii) No violations and no record had the highest overall percentage (47.91 percent). ;

/* 2d */ Proc Freq;
Tables Violations*Prior;
Title "Violations vs. Prior";
* (i) Parolees were less likely to violate their parole. 73.3 percent of parolees did not violate
their parole, compared to 26.7 percent who did.
(ii) Those in penitentiary were most likely to violate their parole. 41.67 percent of parolees formerly
in penitentiary violated parole, compared to 39.33 percent formerly in school, 34.67 percent formerly
in jail, 27.99 percent fined, and 21.61 percent with no prior punishment.
(iii) 3.77 percent of parolees had a prior record in jail and violated parole.
(iv) 34.67 percent of parolees who had a prior record in jail violated parole. ;
```