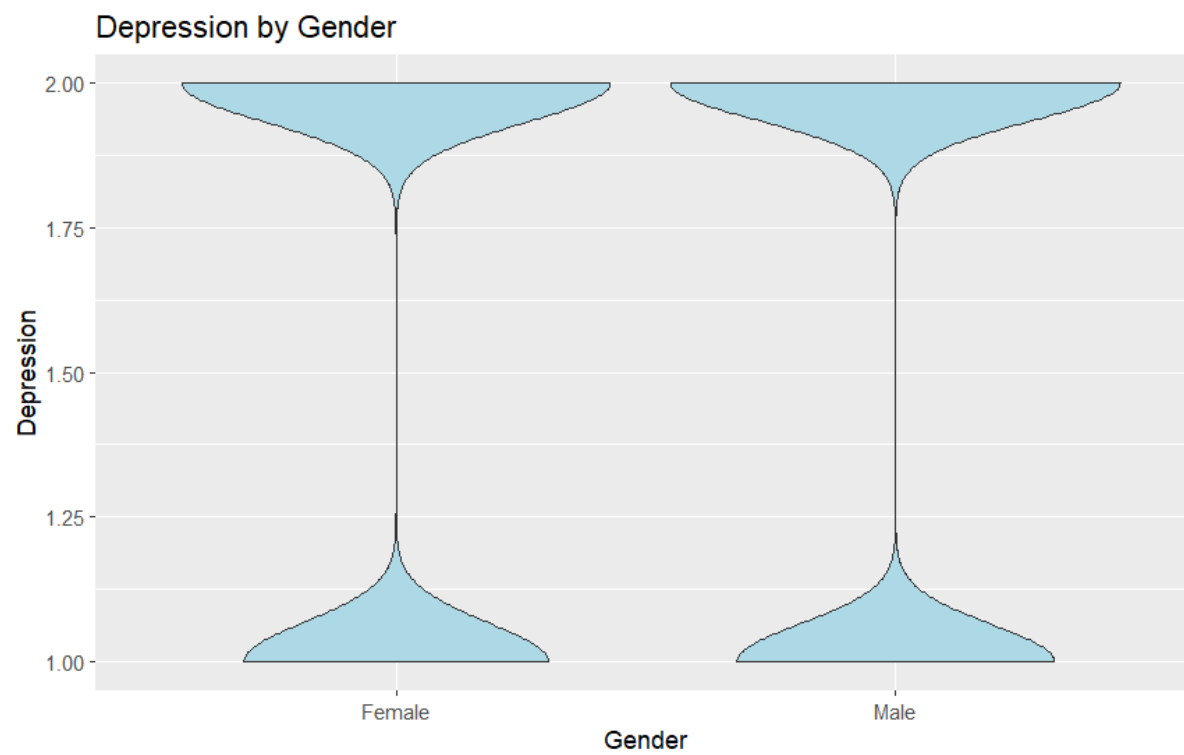
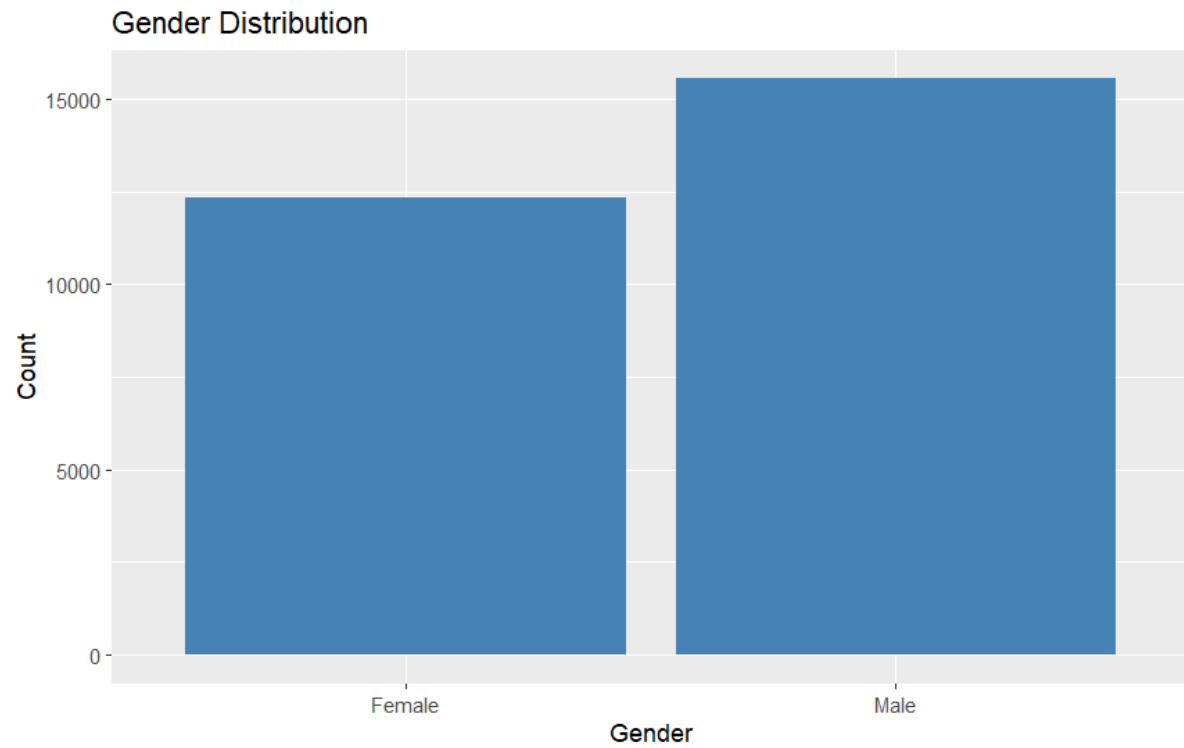
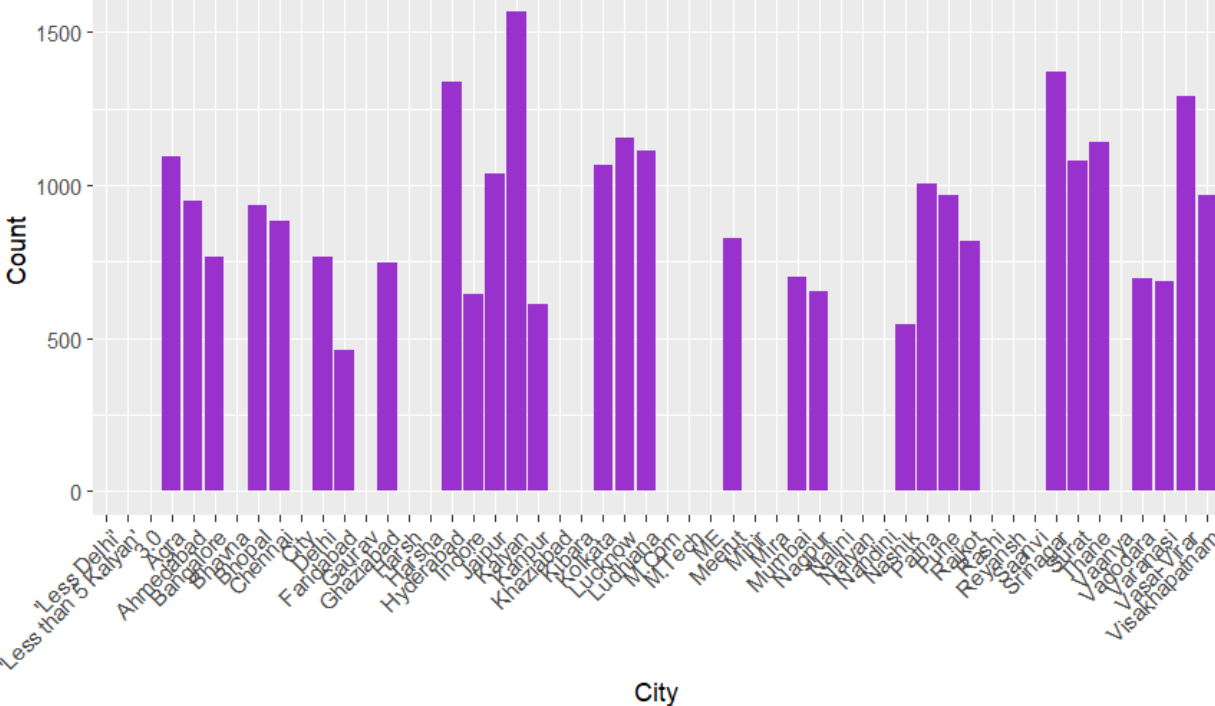


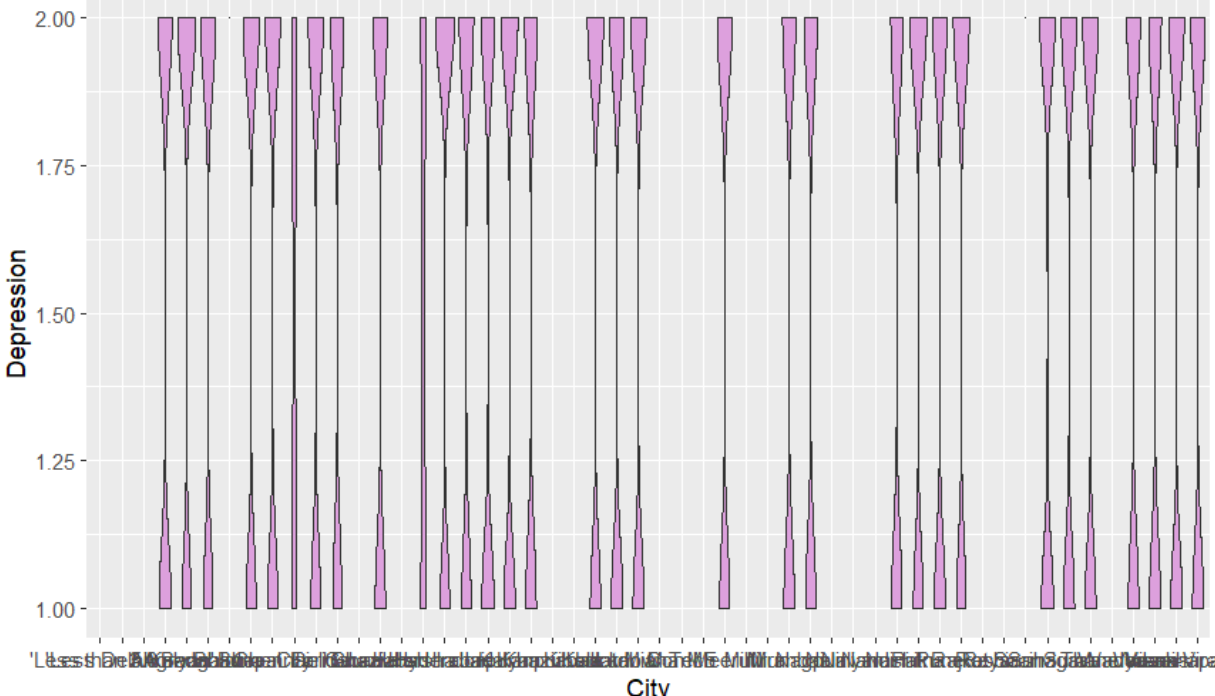
Task-1(Output)

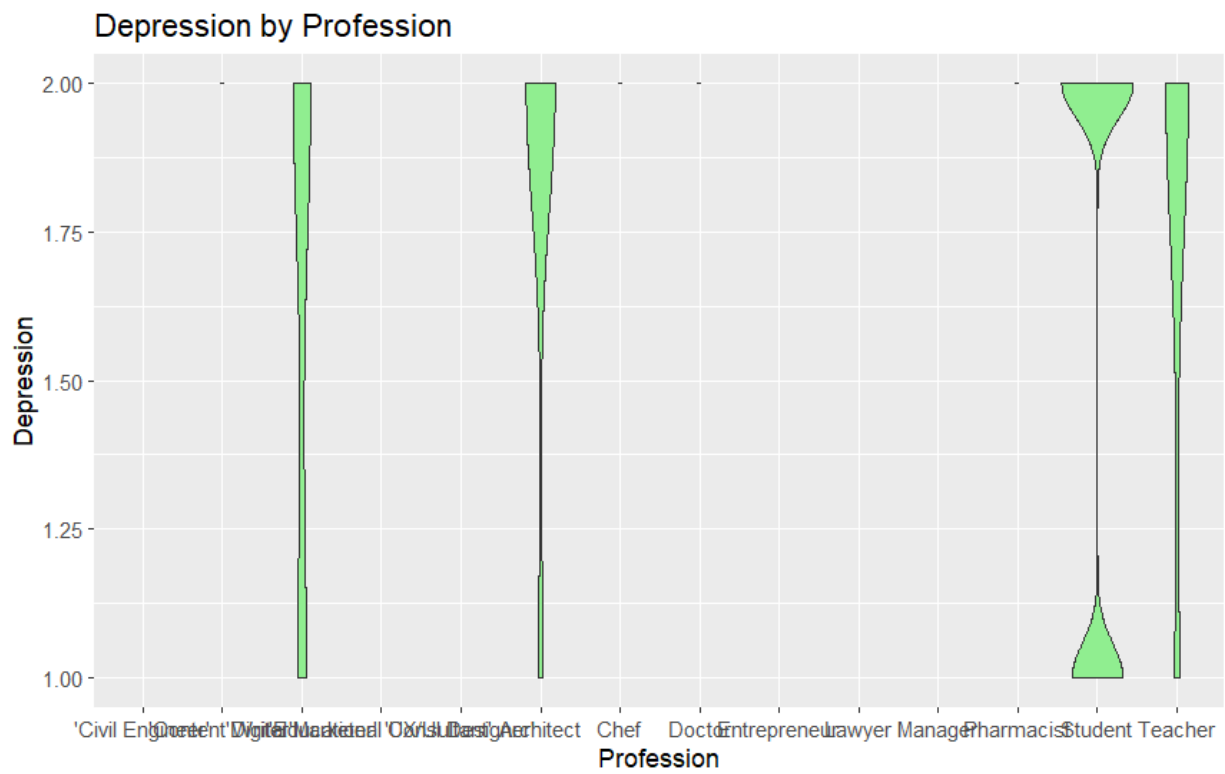
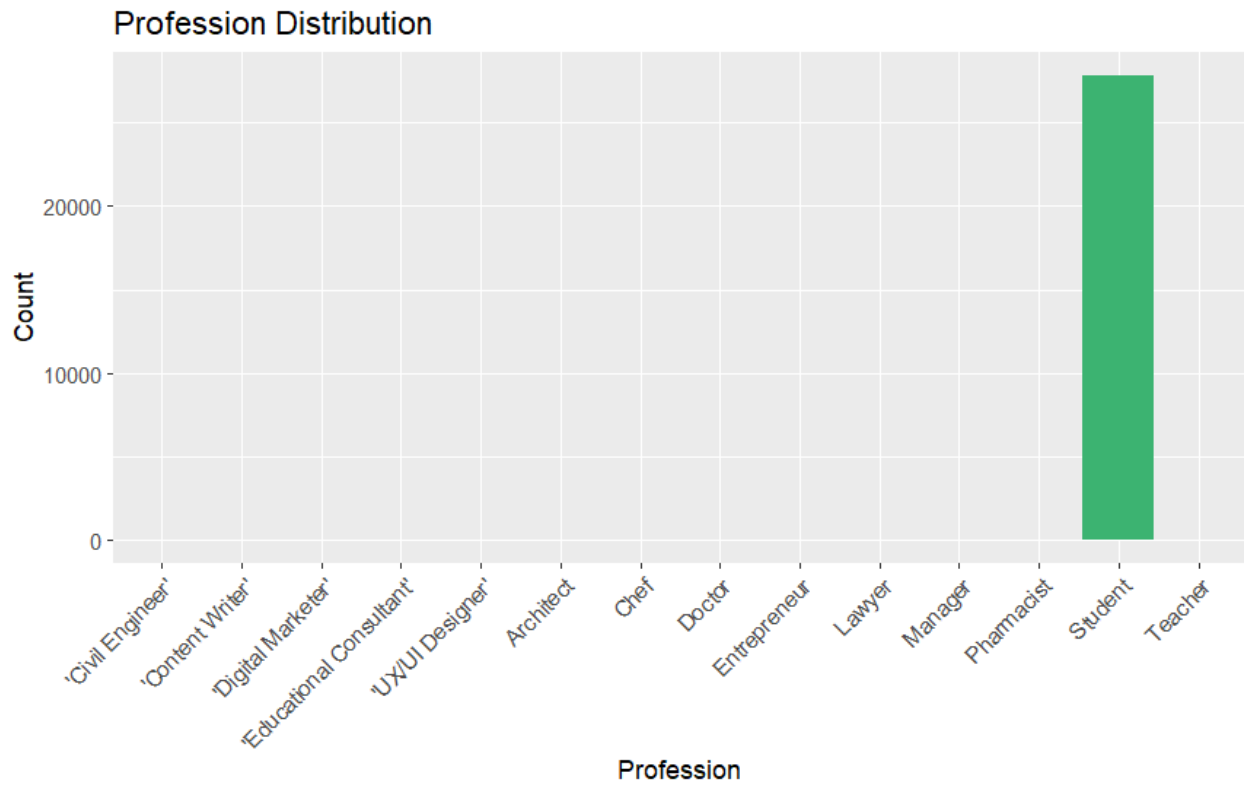


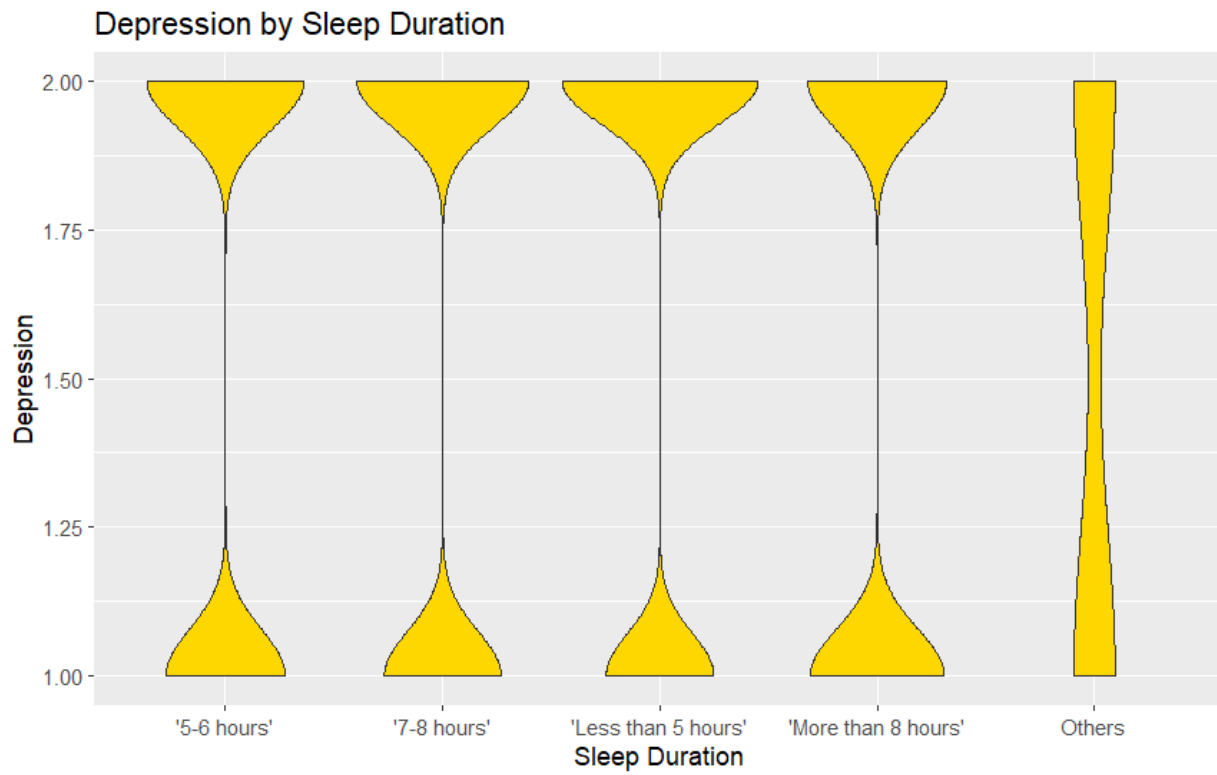
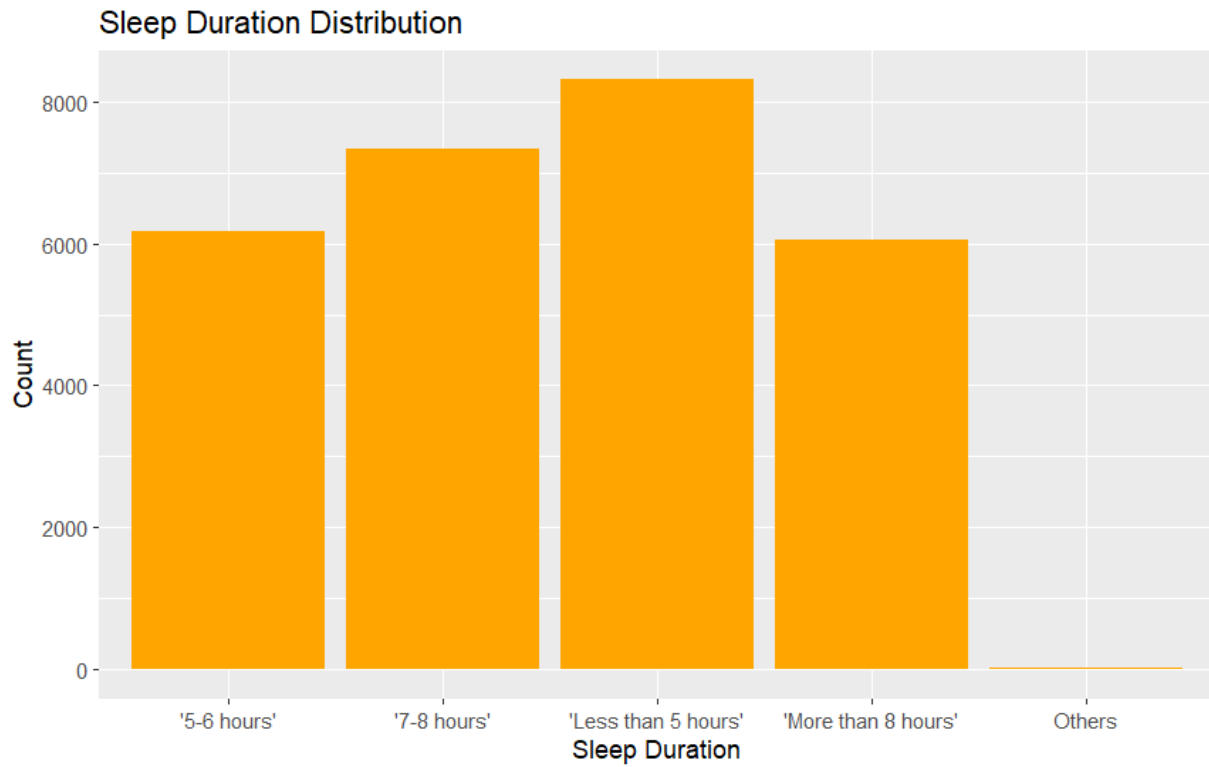
City Distribution

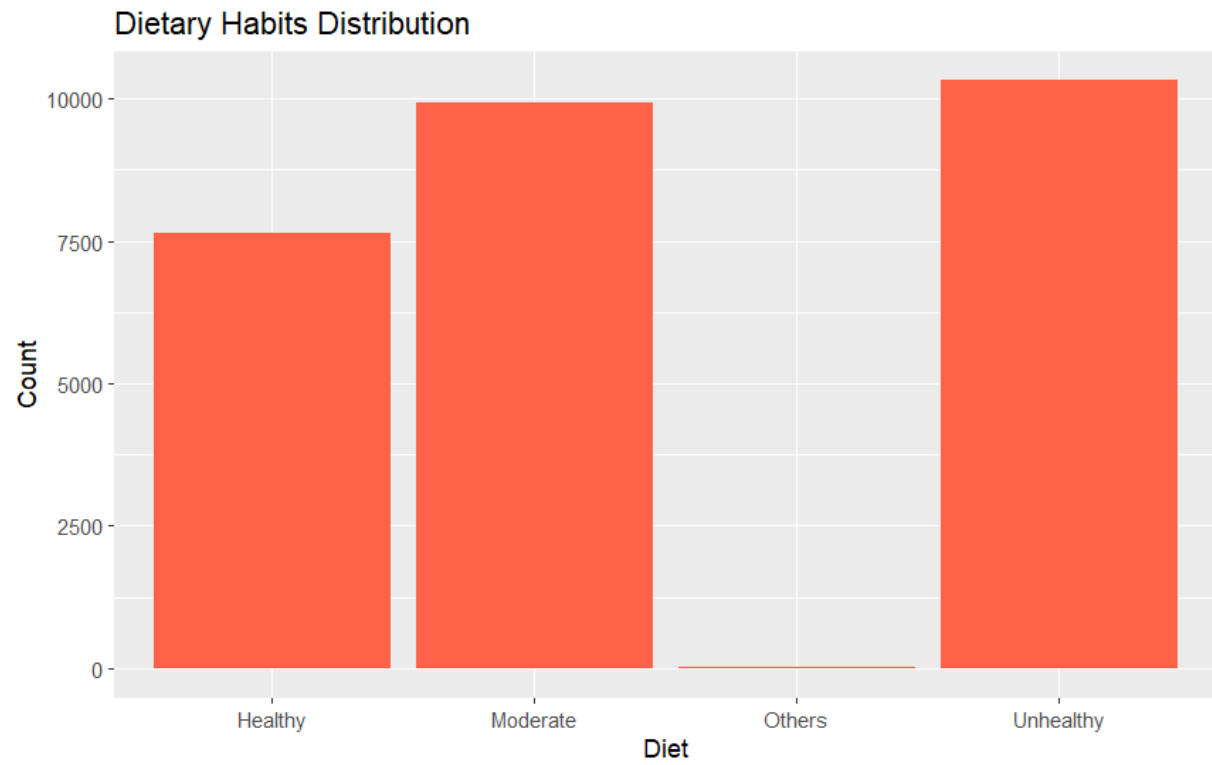


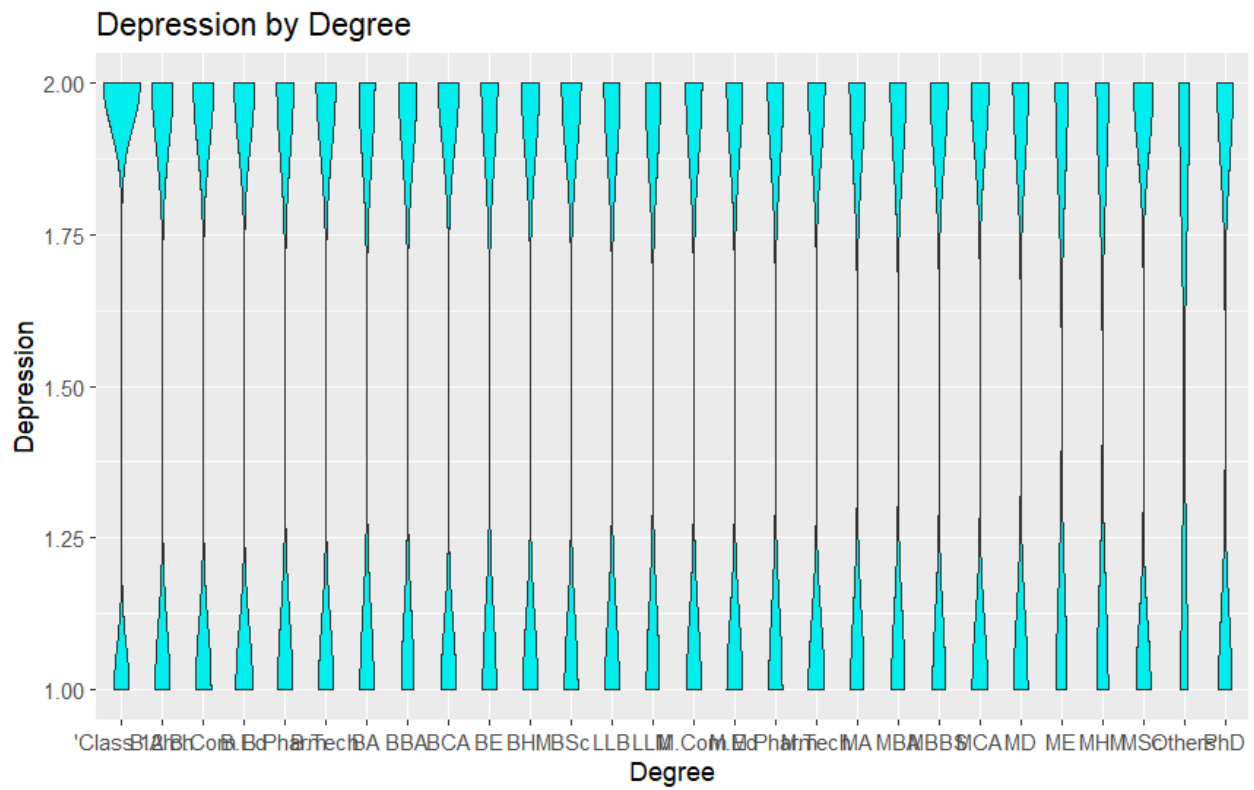
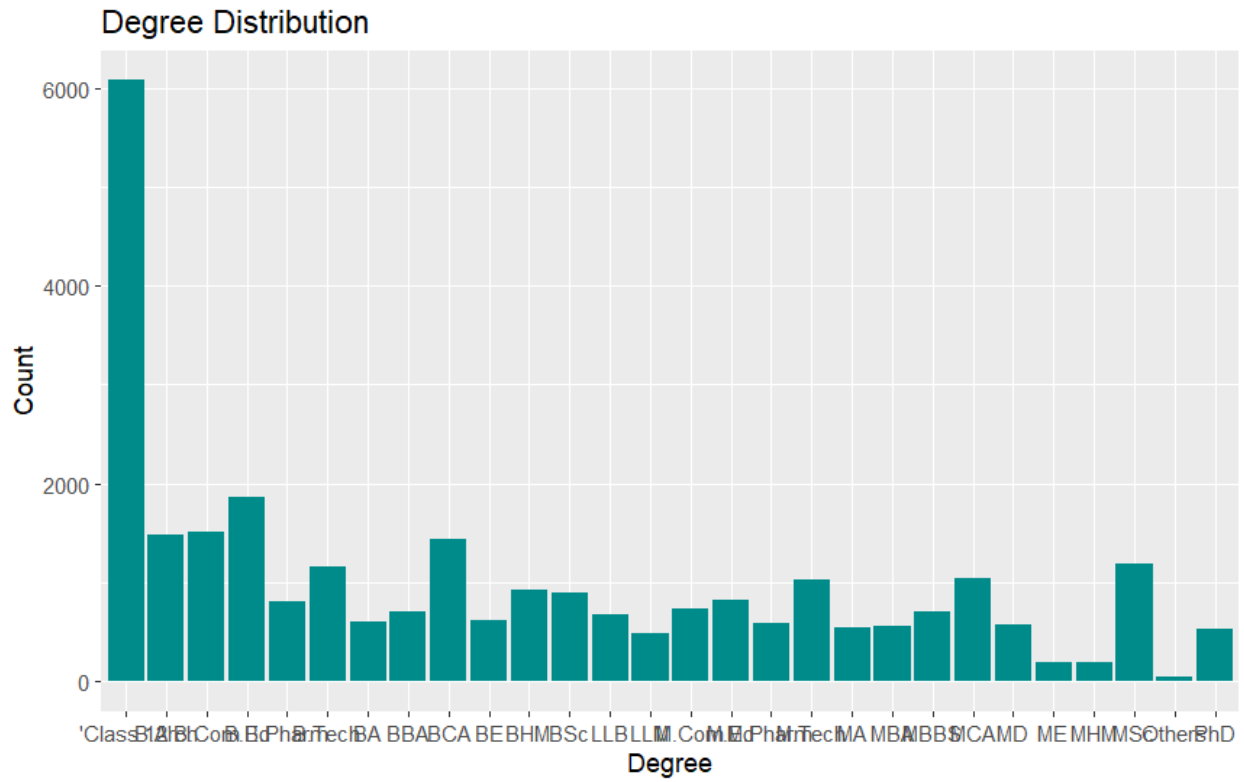
Depression by City

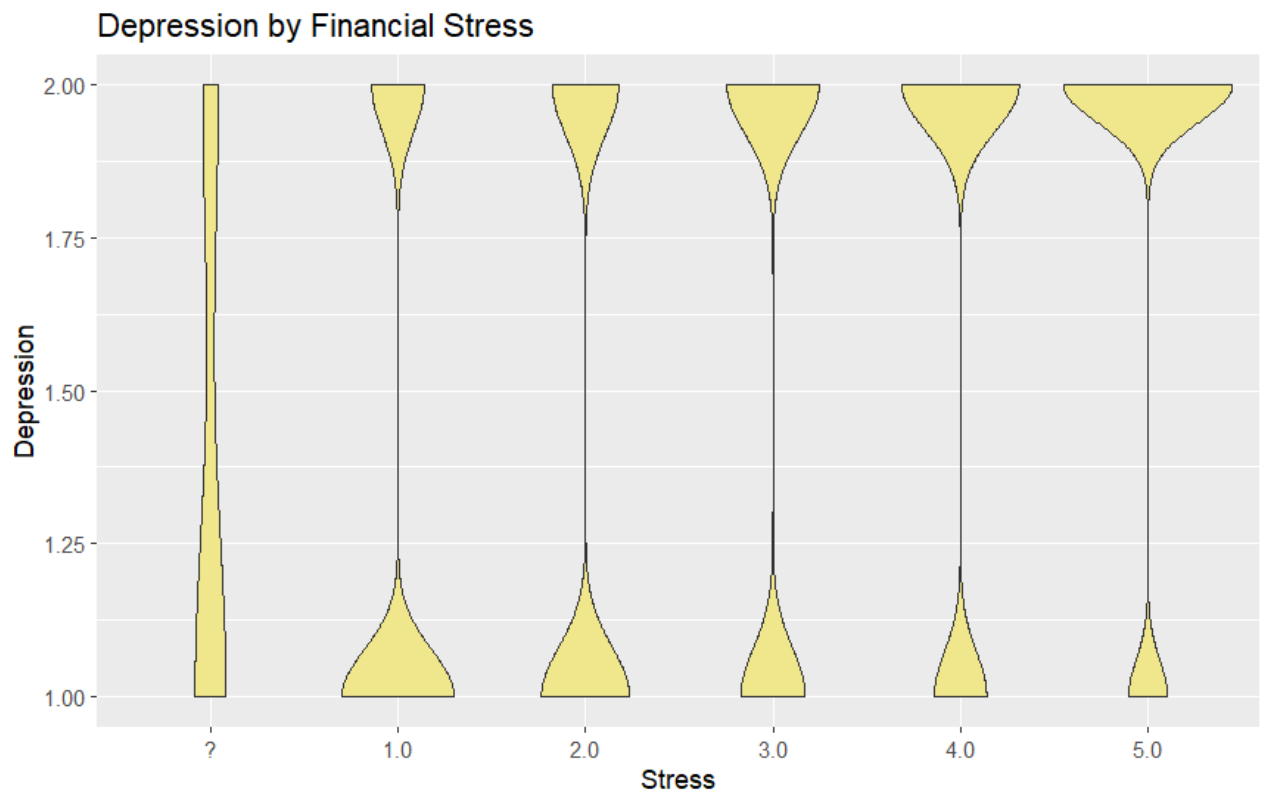
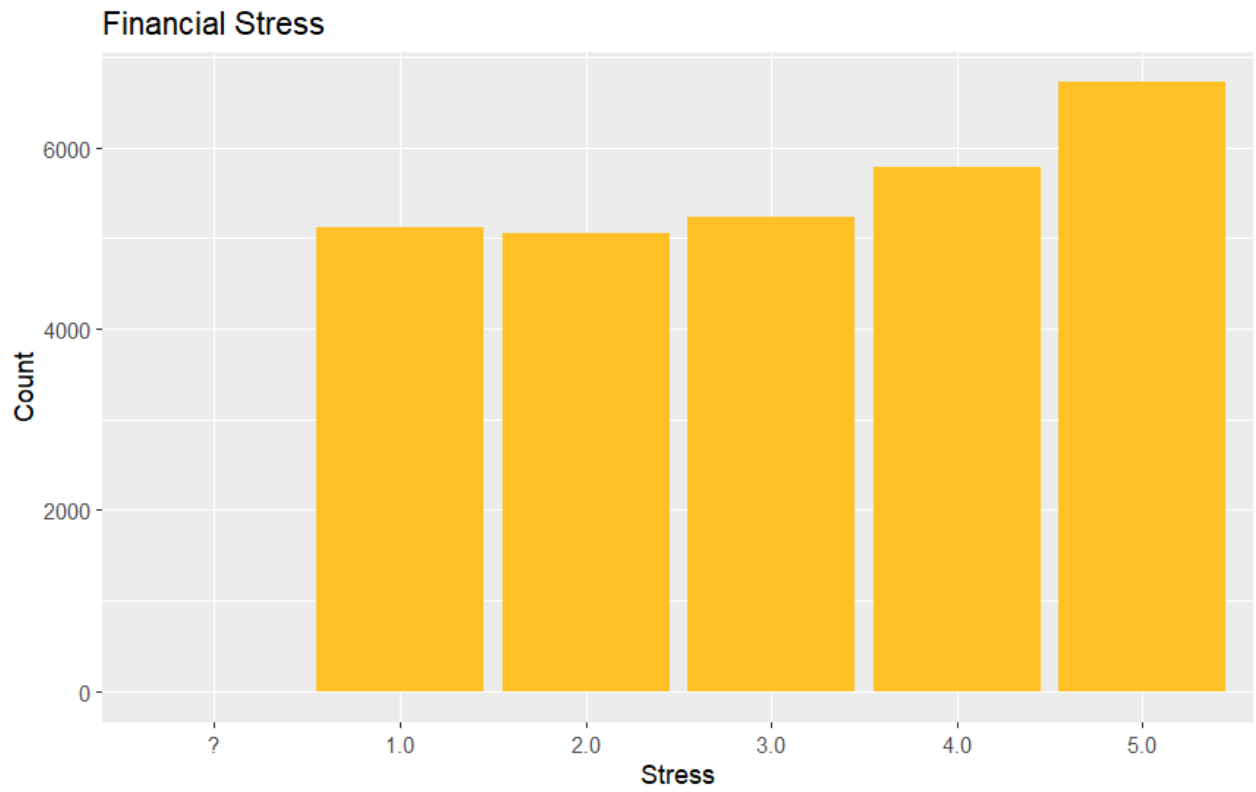


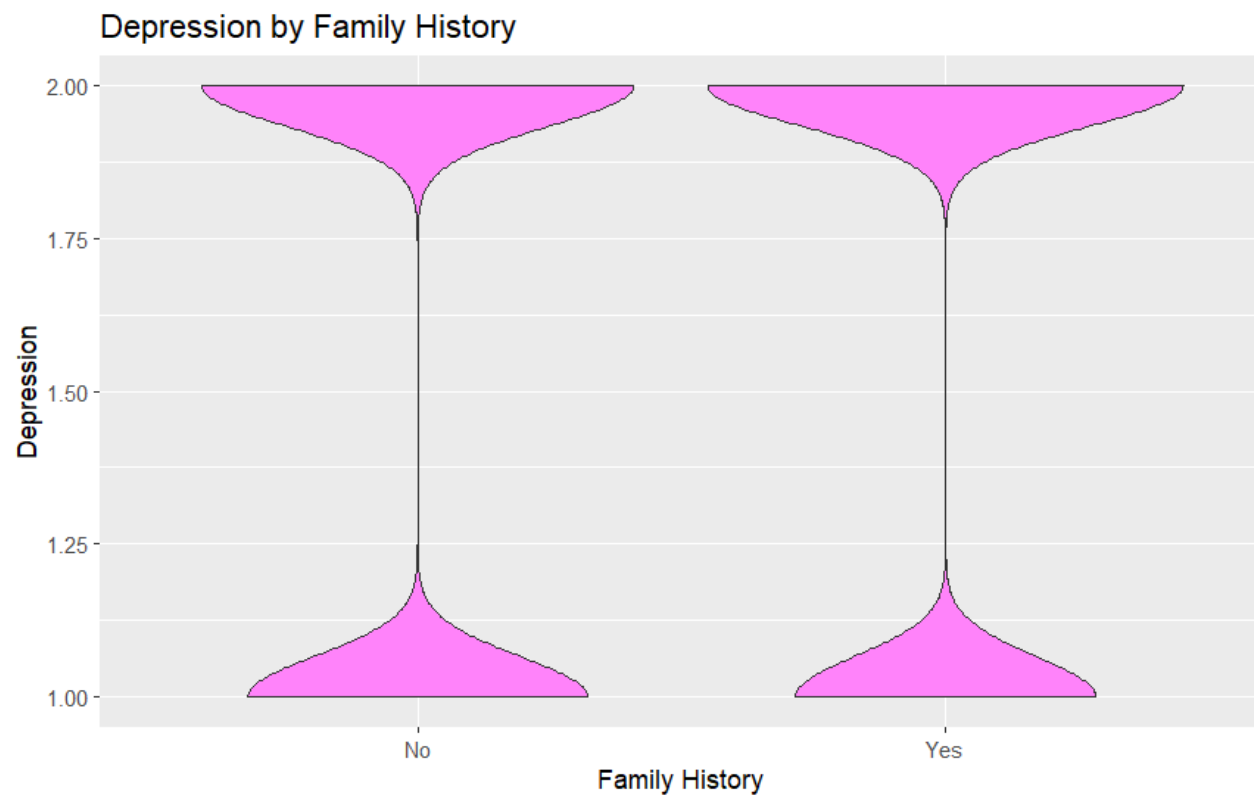
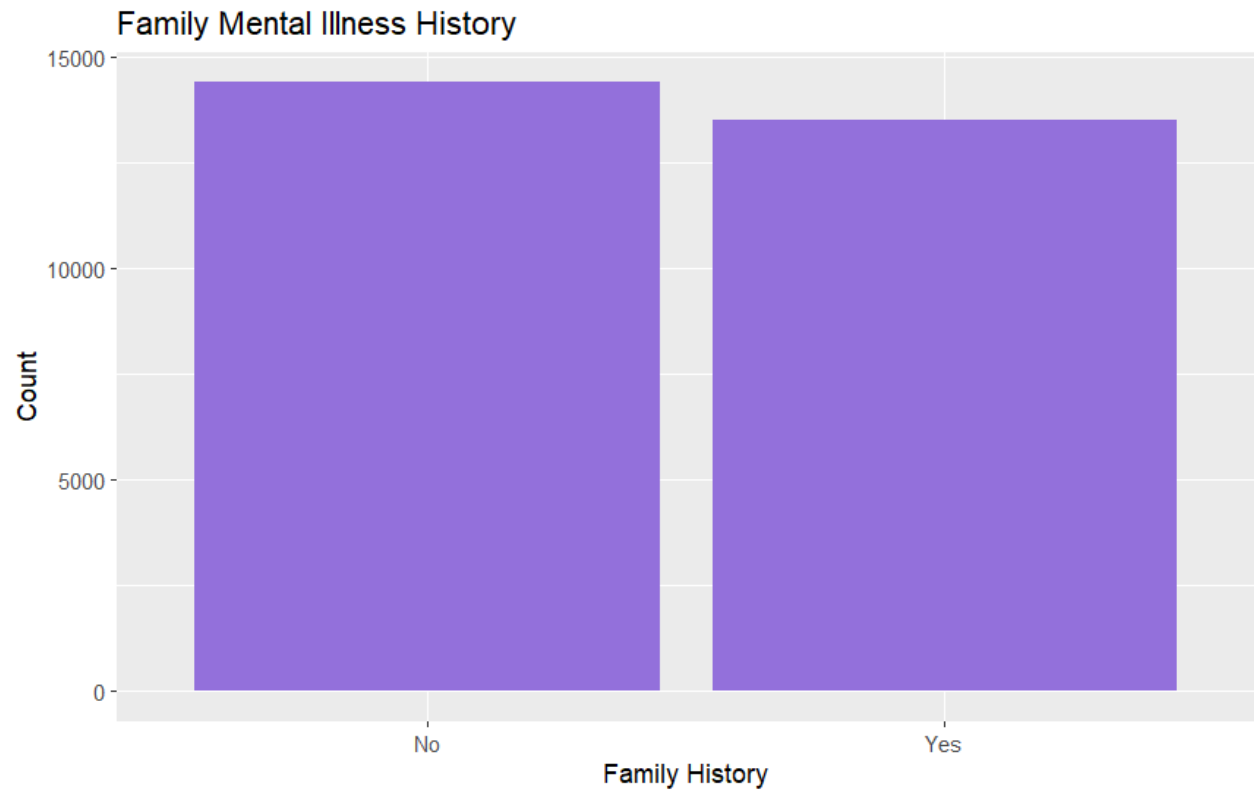


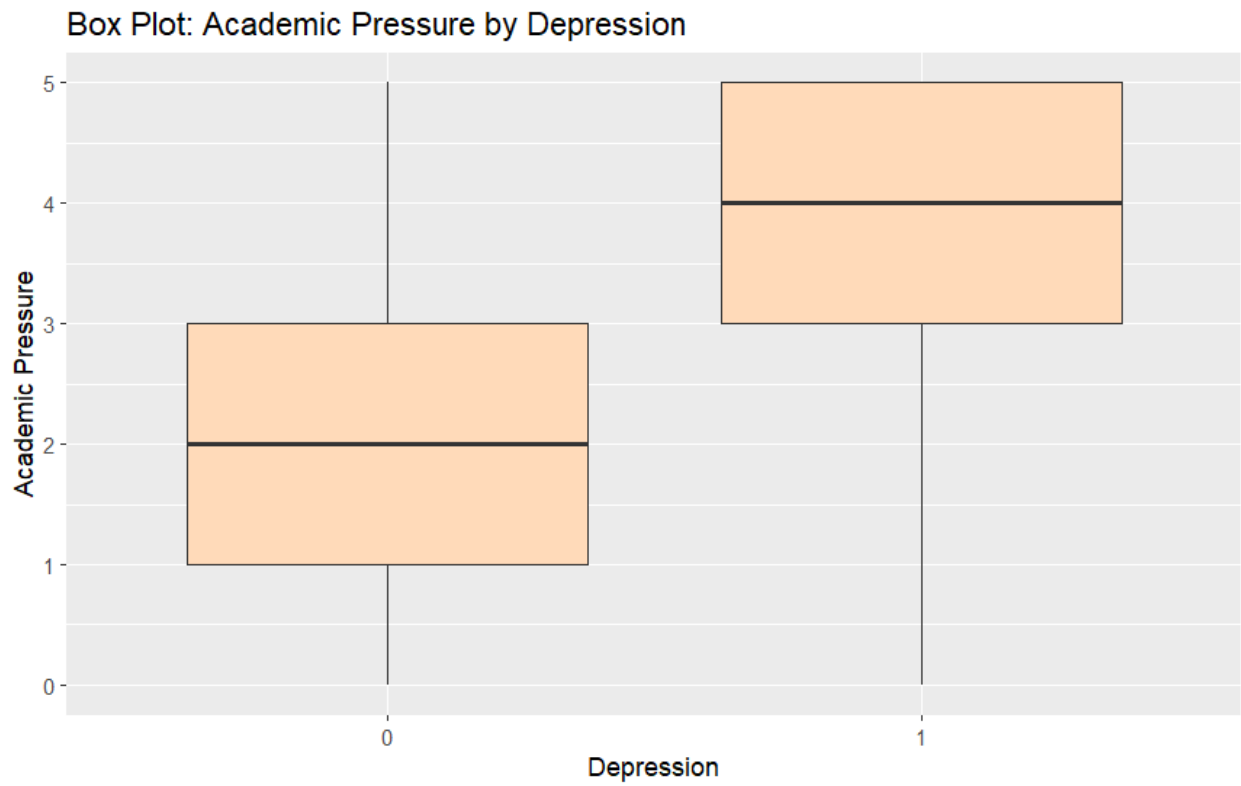
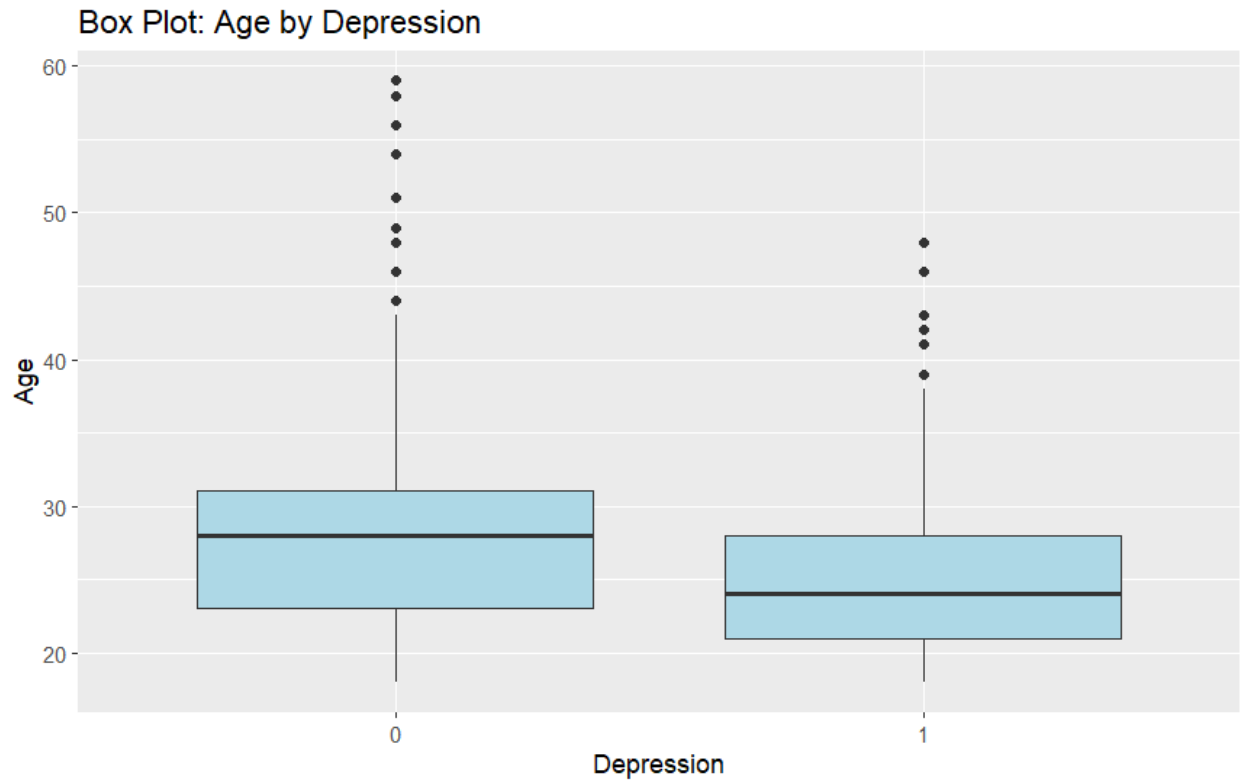




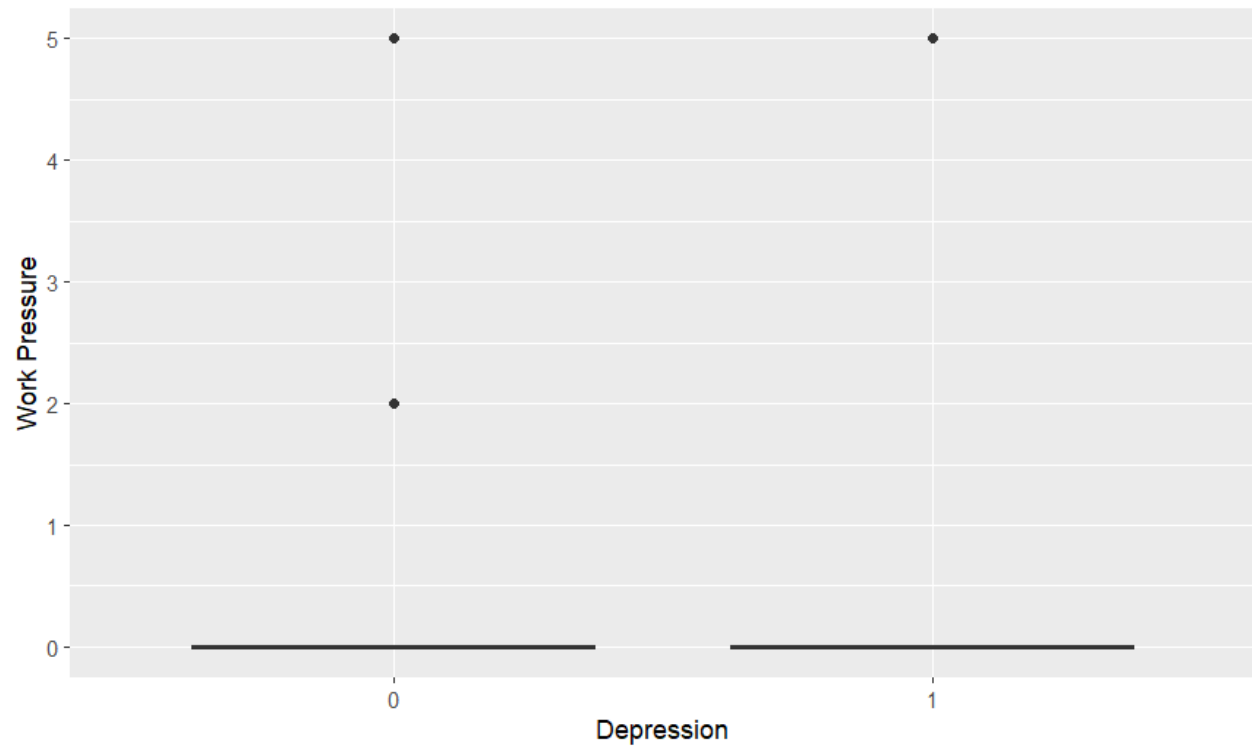




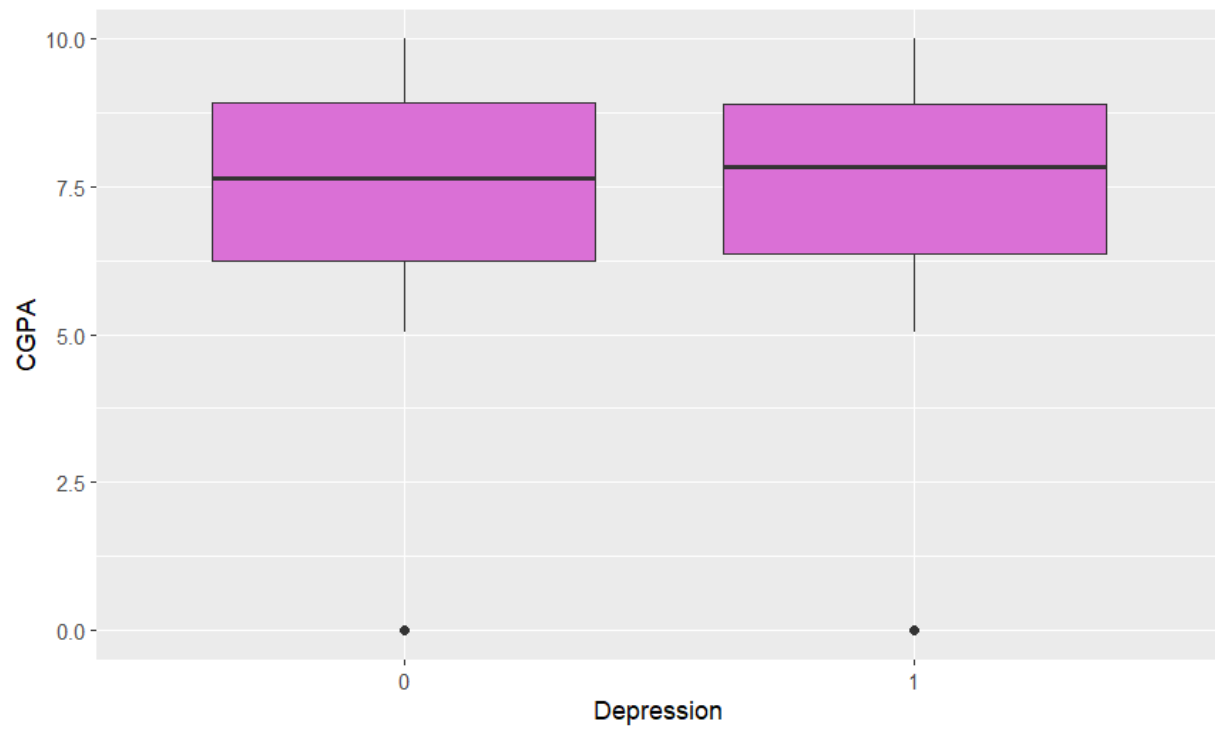




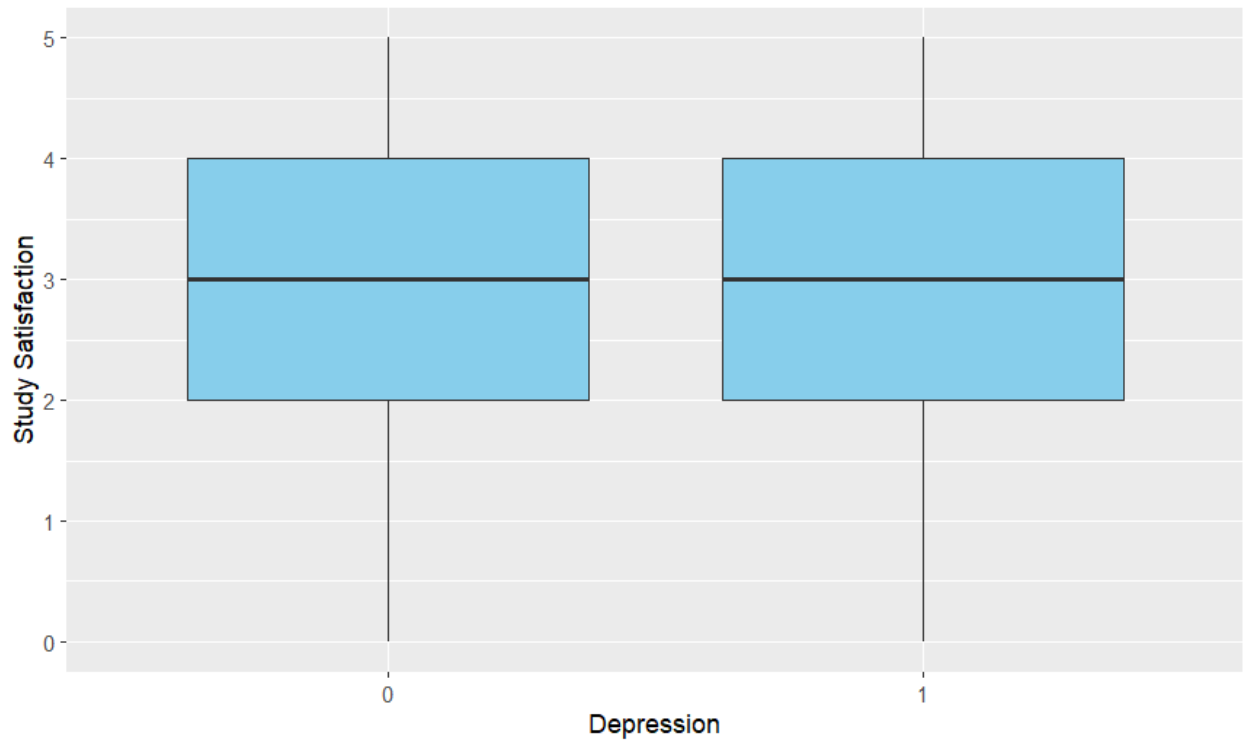
Box Plot: Work Pressure by Depression



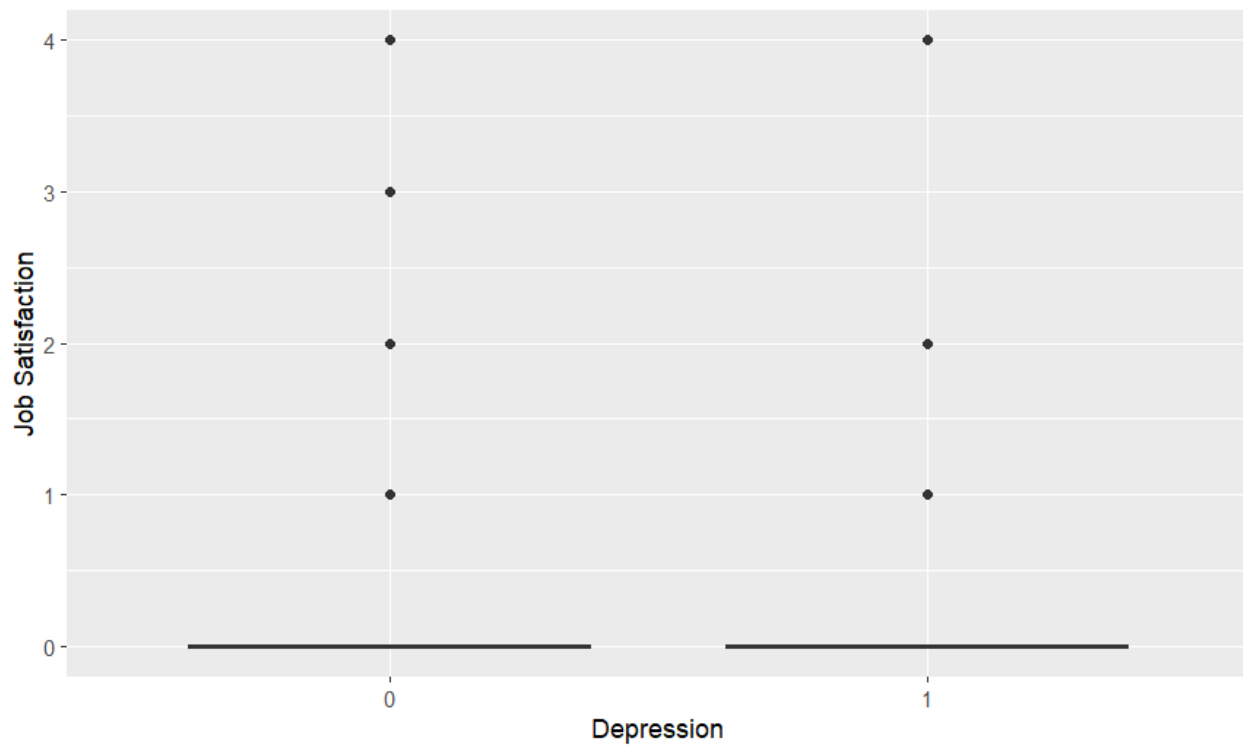
Box Plot: CGPA by Depression



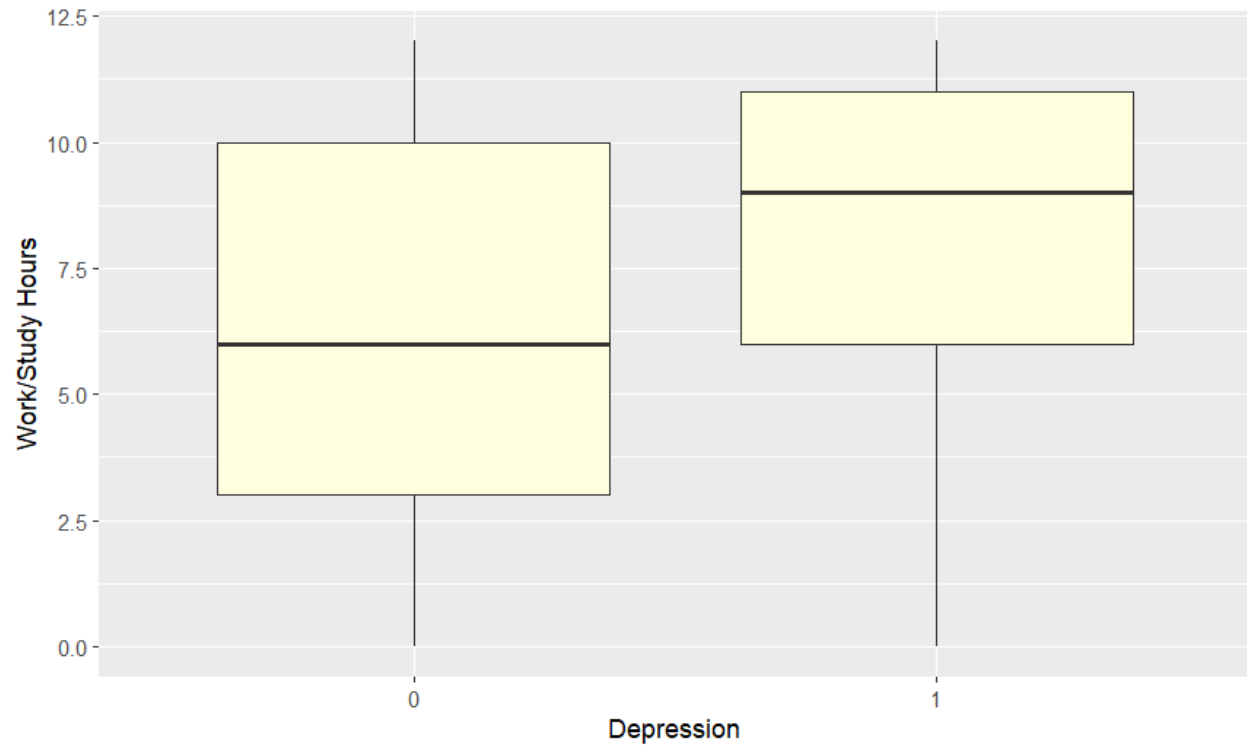
Box Plot: Study Satisfaction by Depression



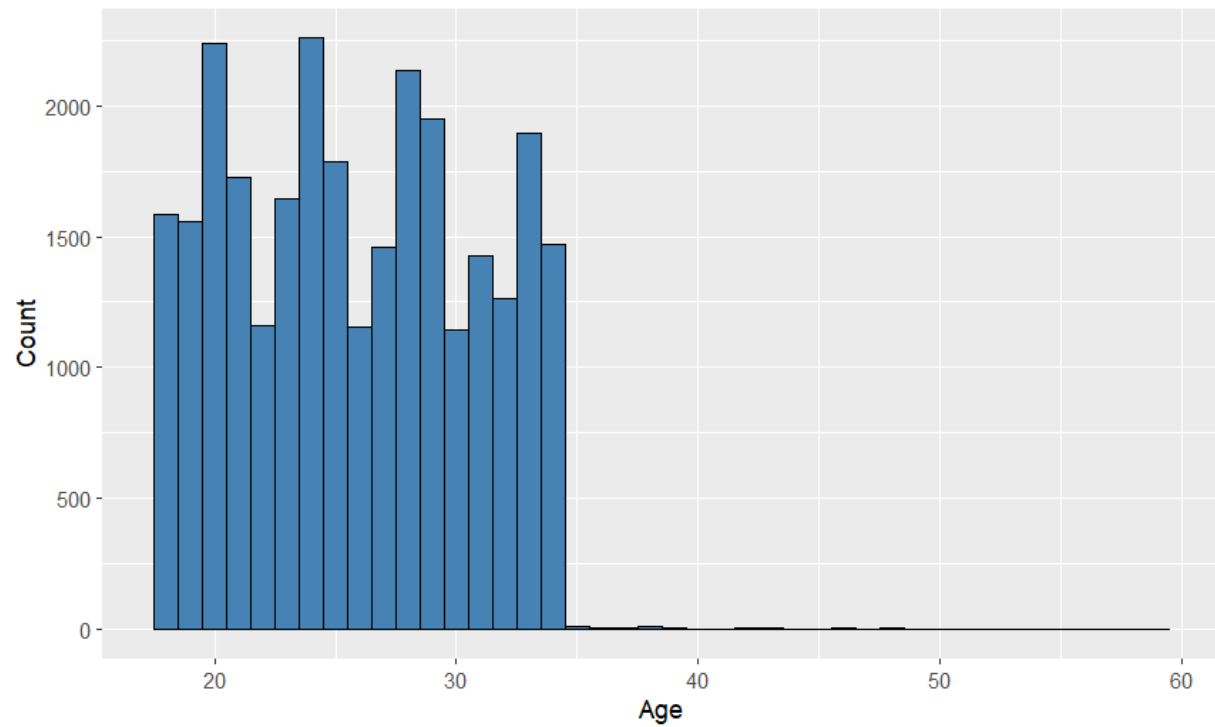
Box Plot: Job Satisfaction by Depression

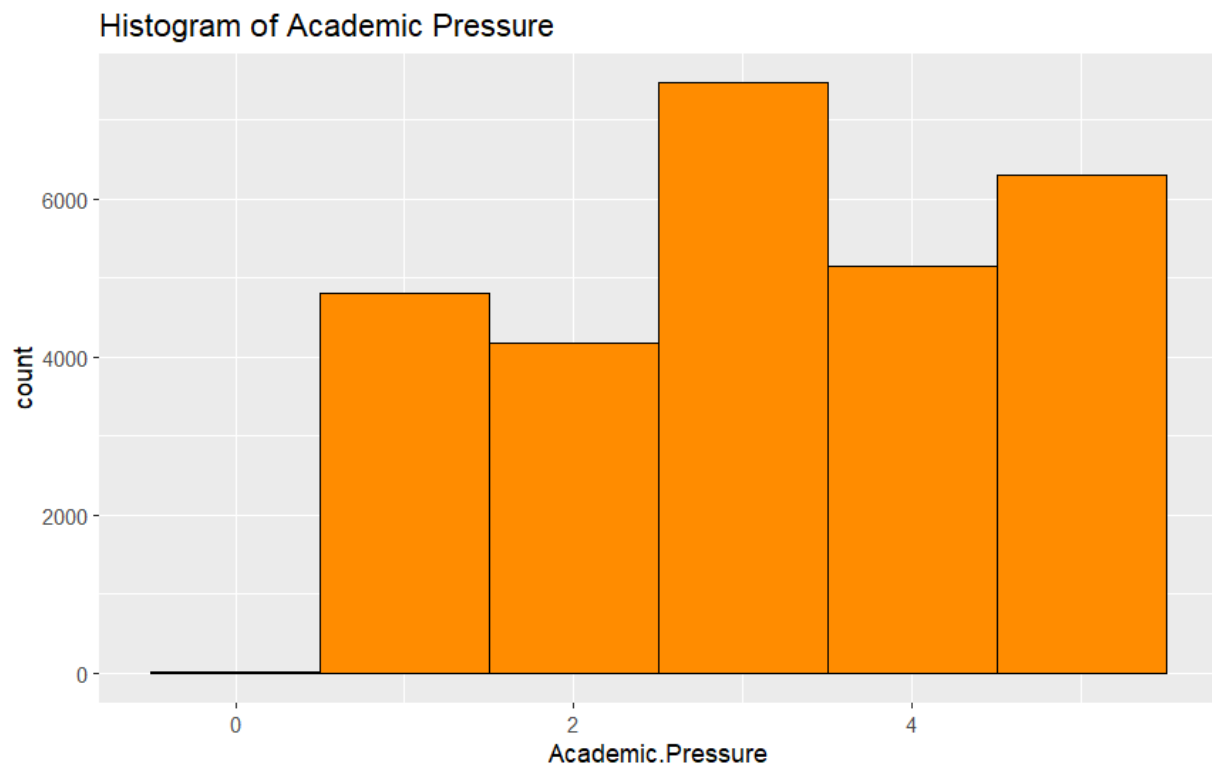
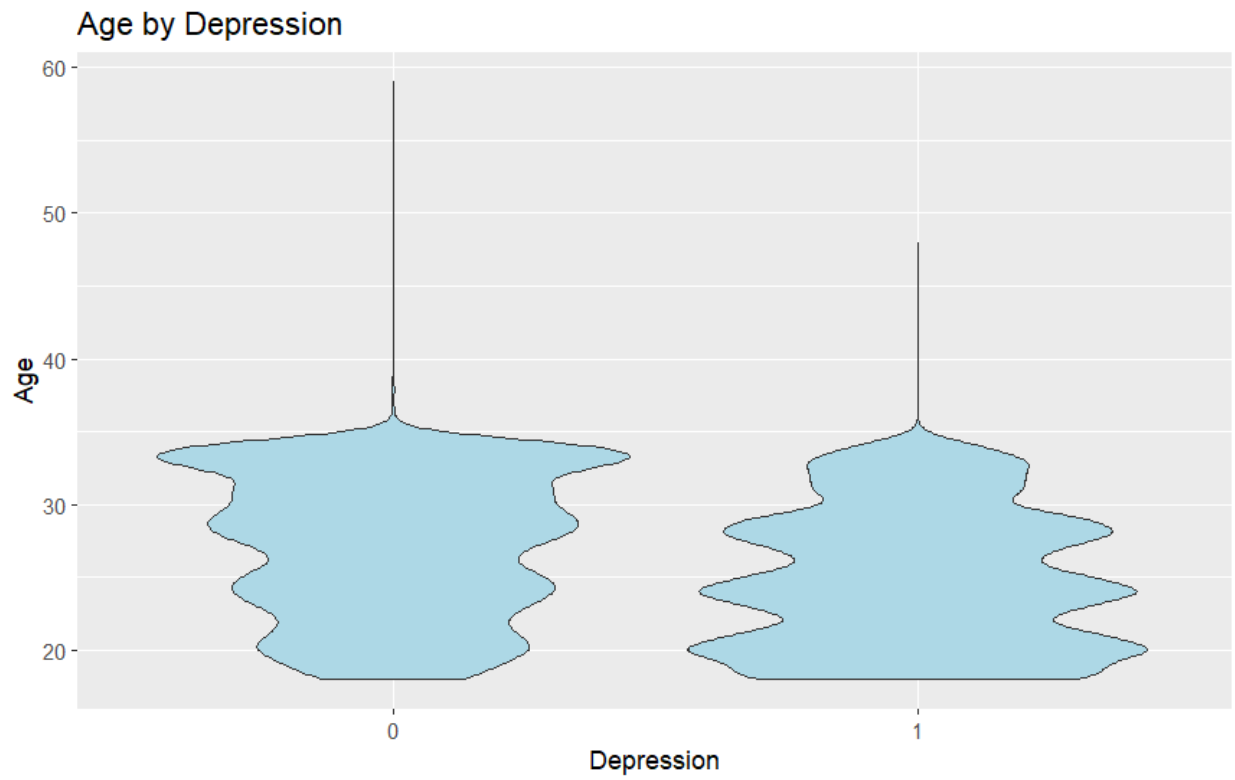


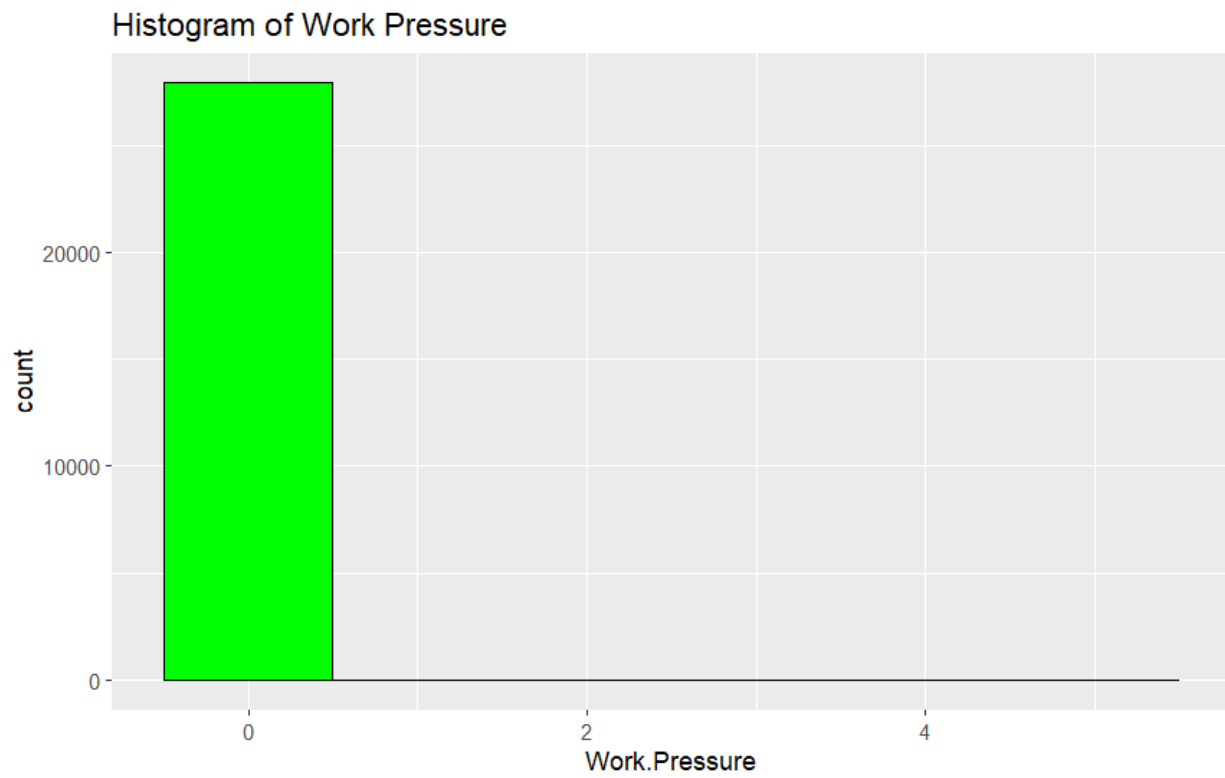
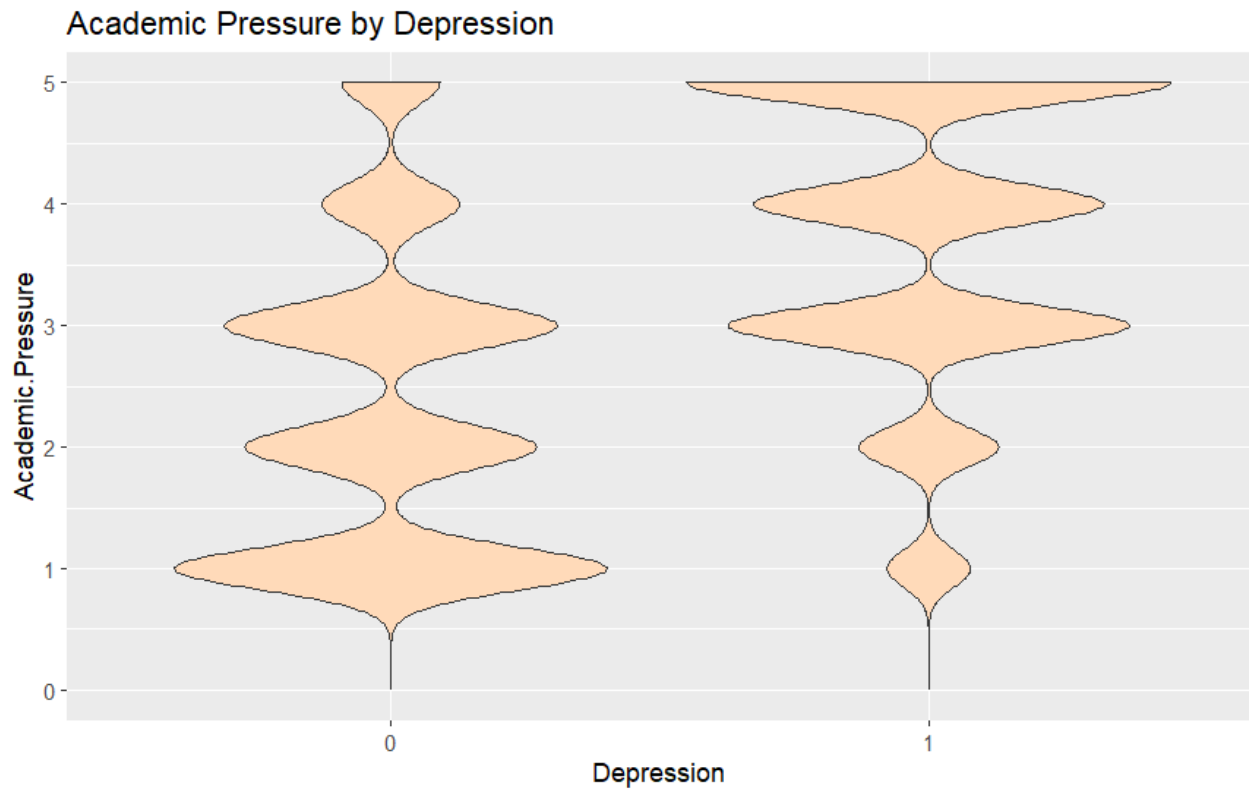
Box Plot: Work/Study Hours by Depression

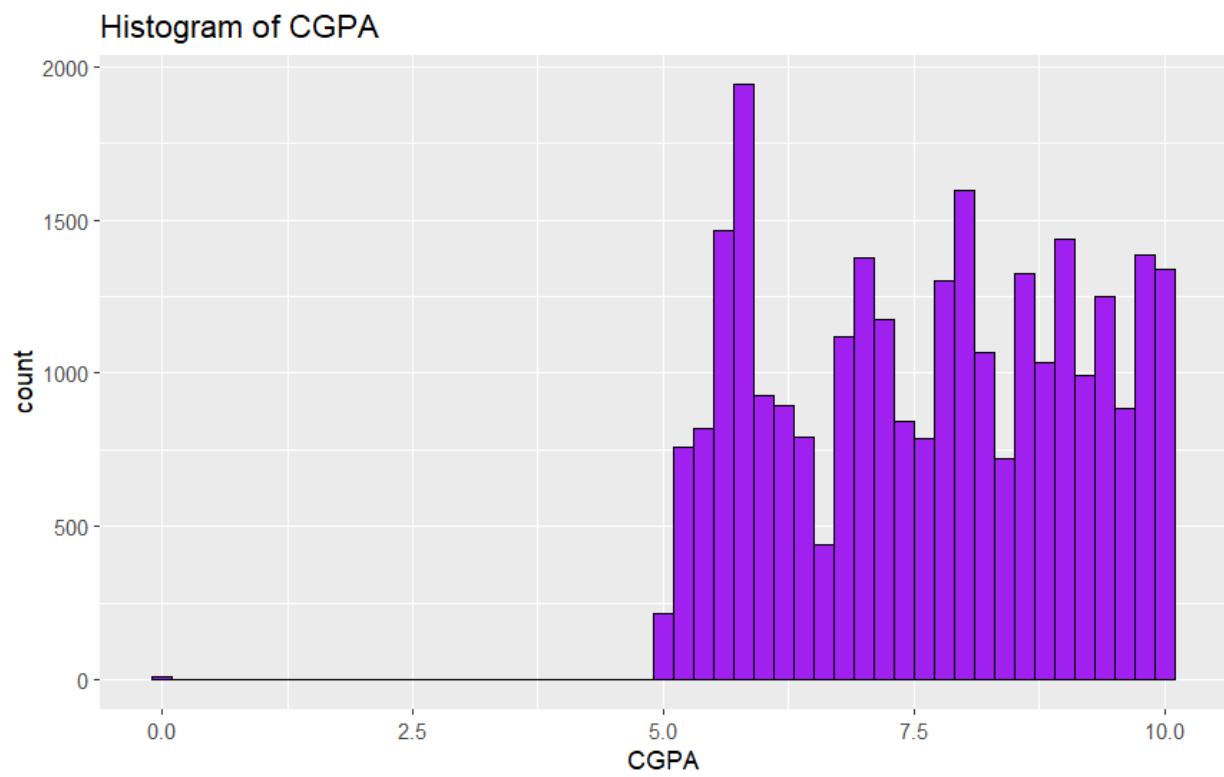
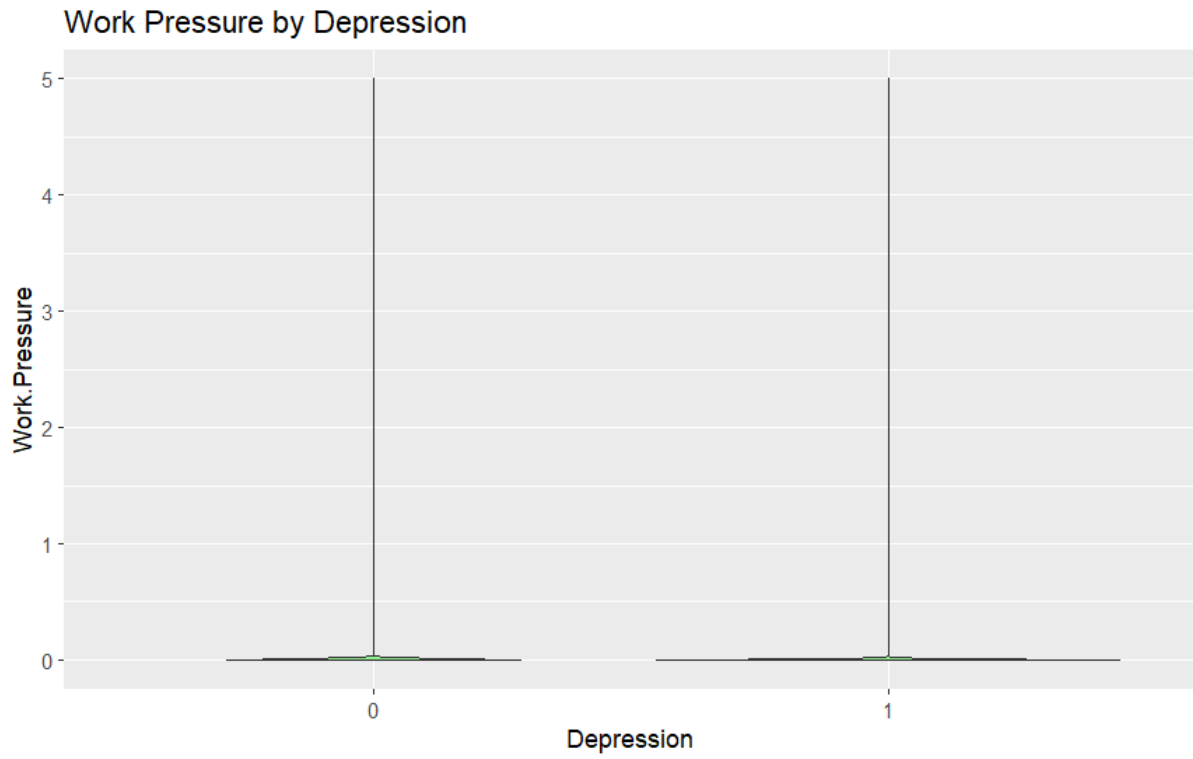


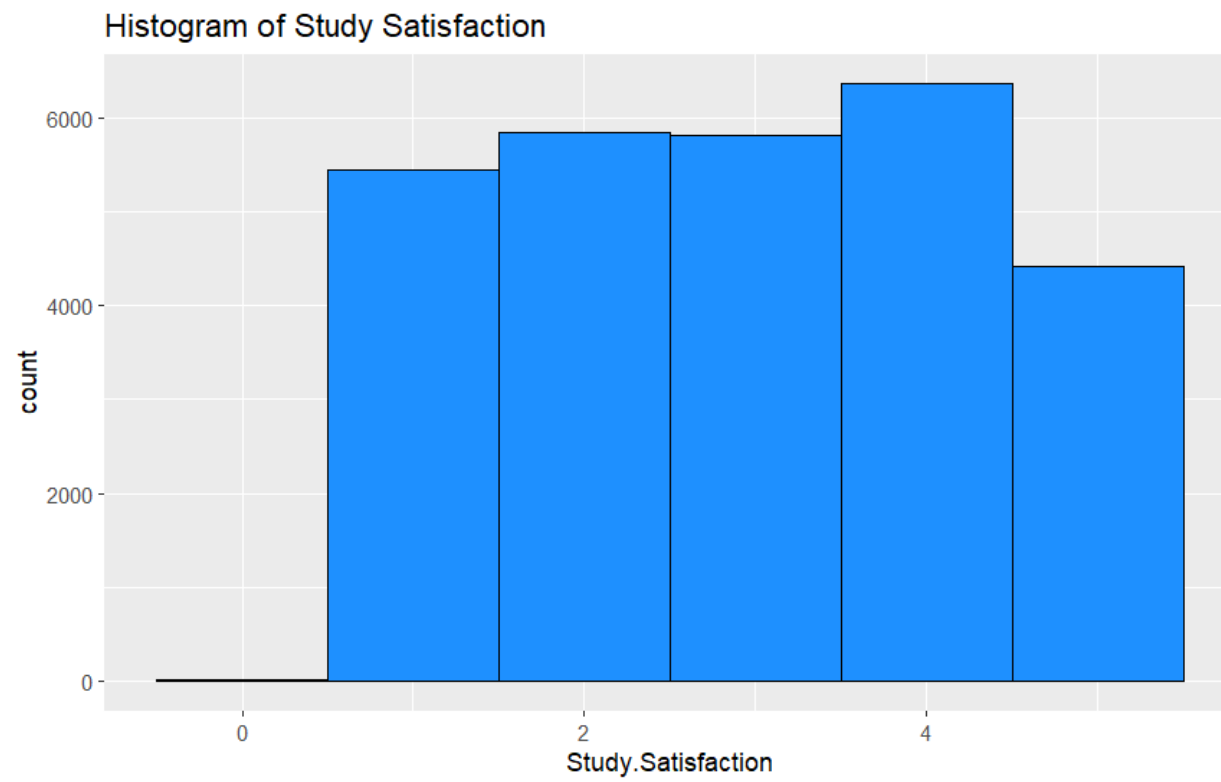
Histogram of Age

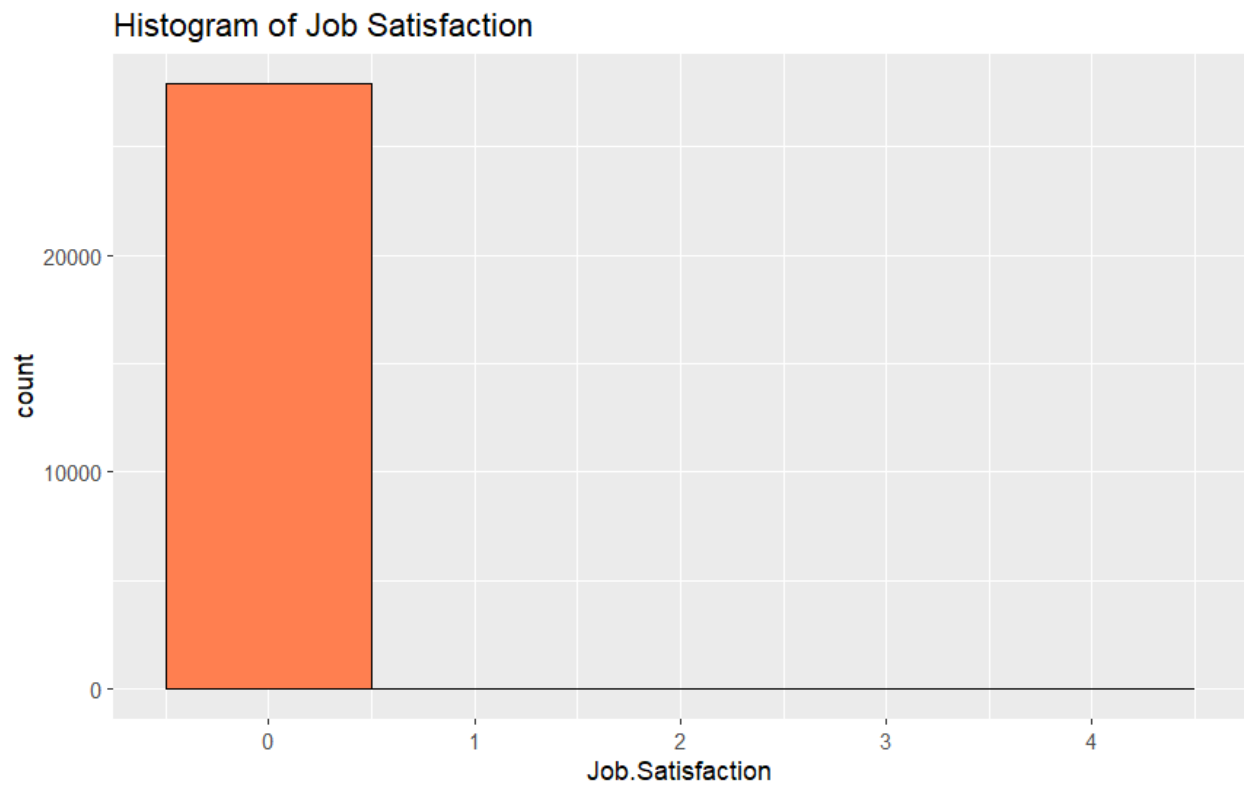
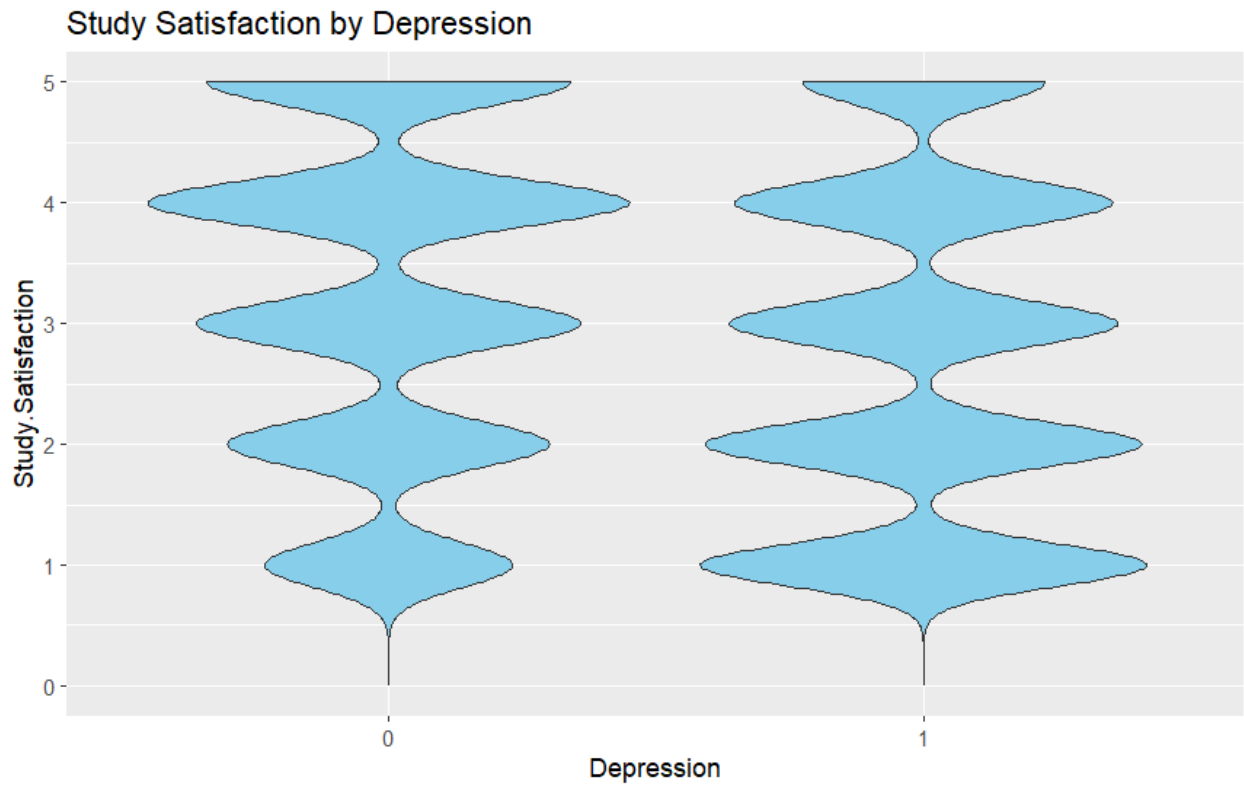


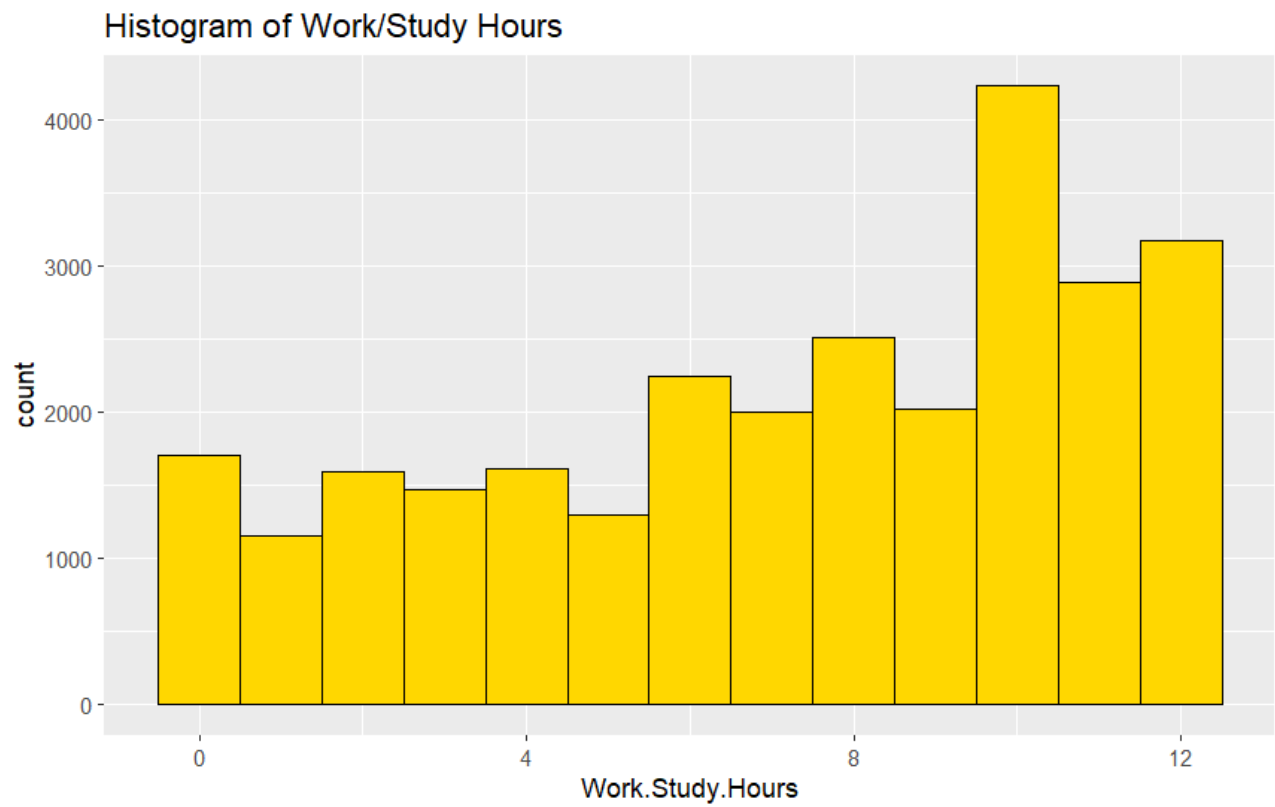
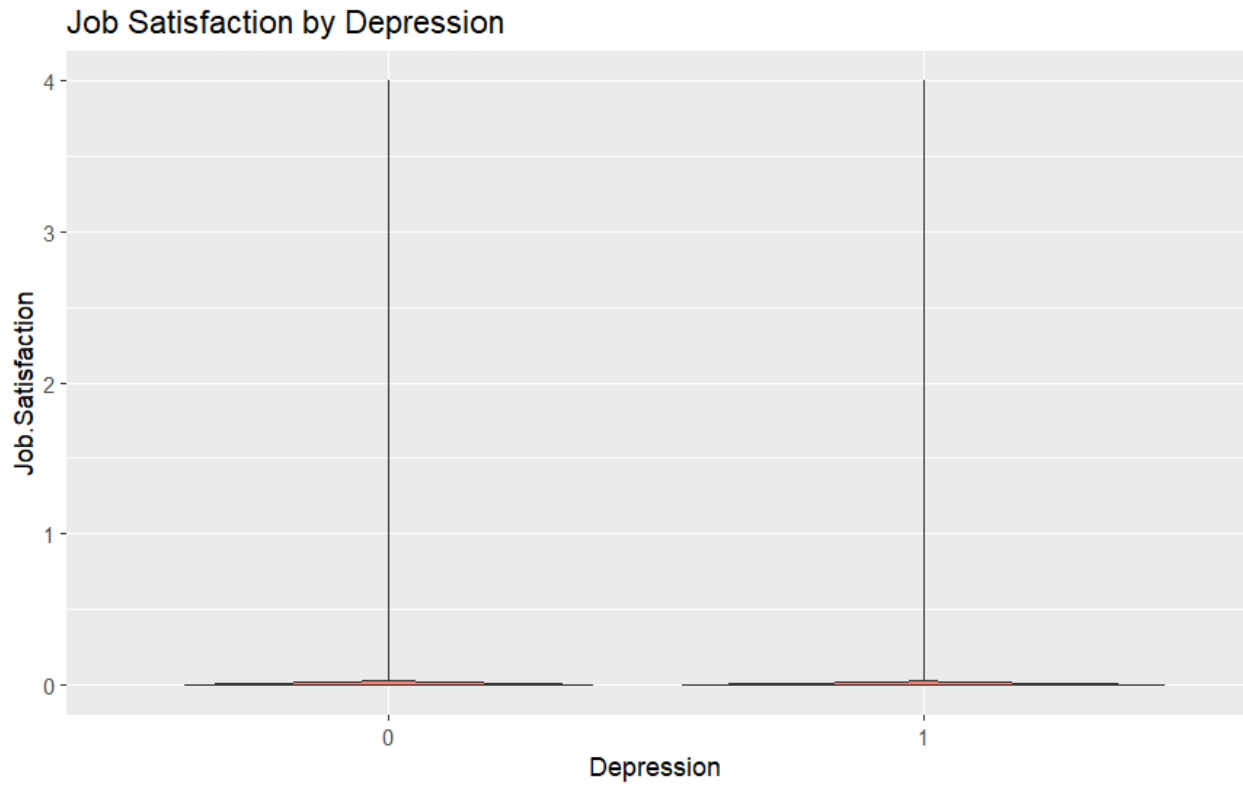


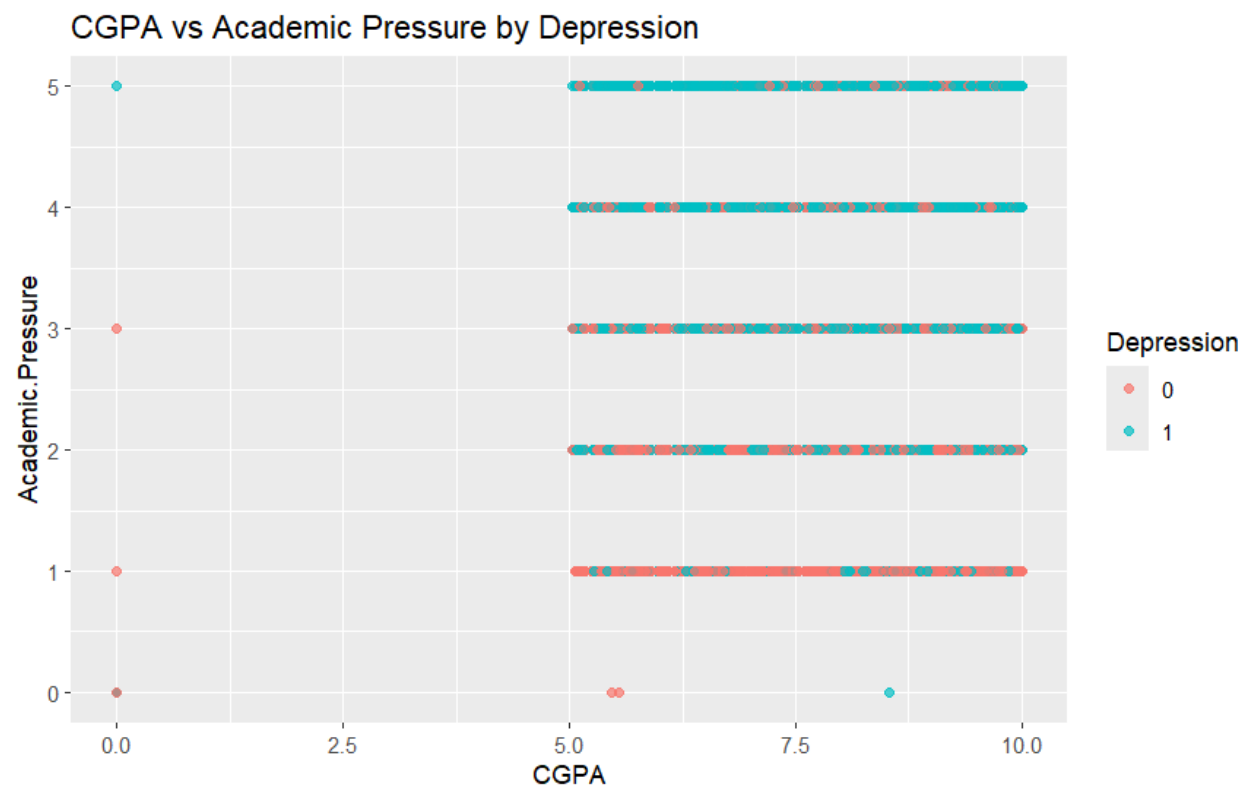
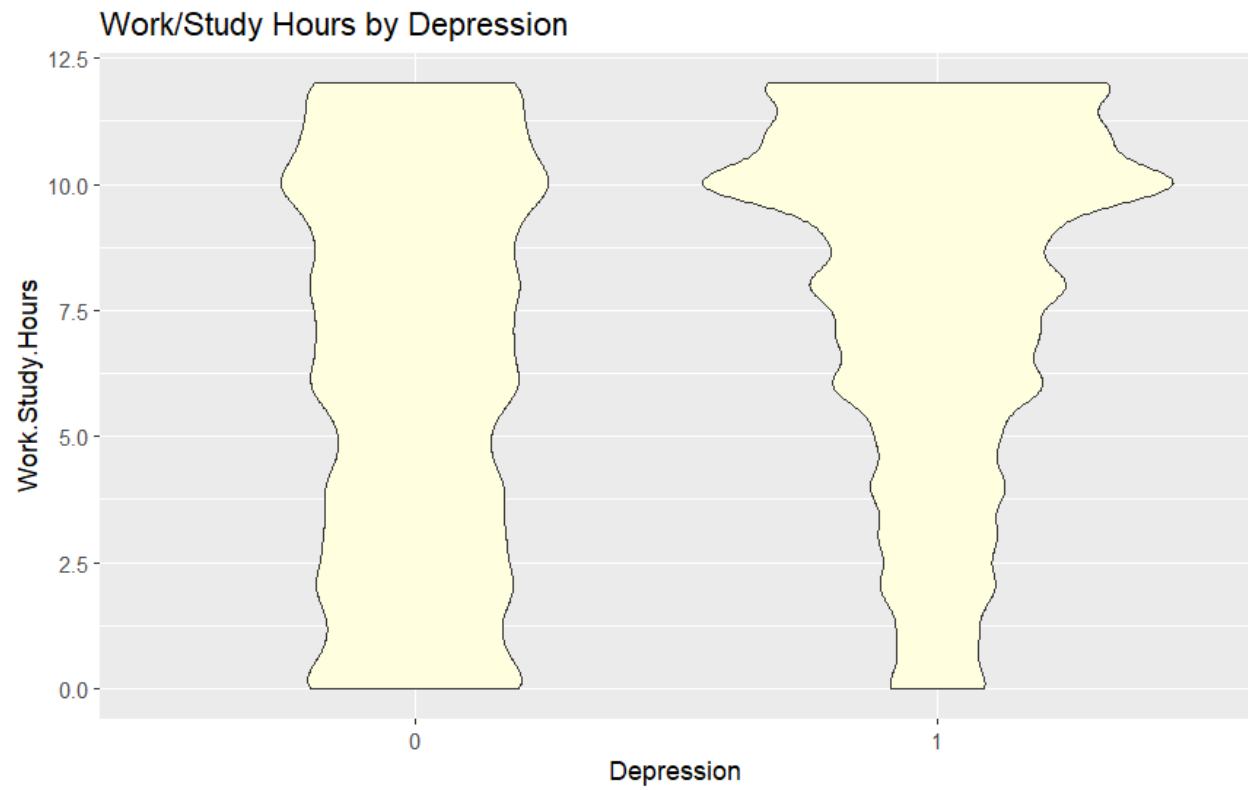


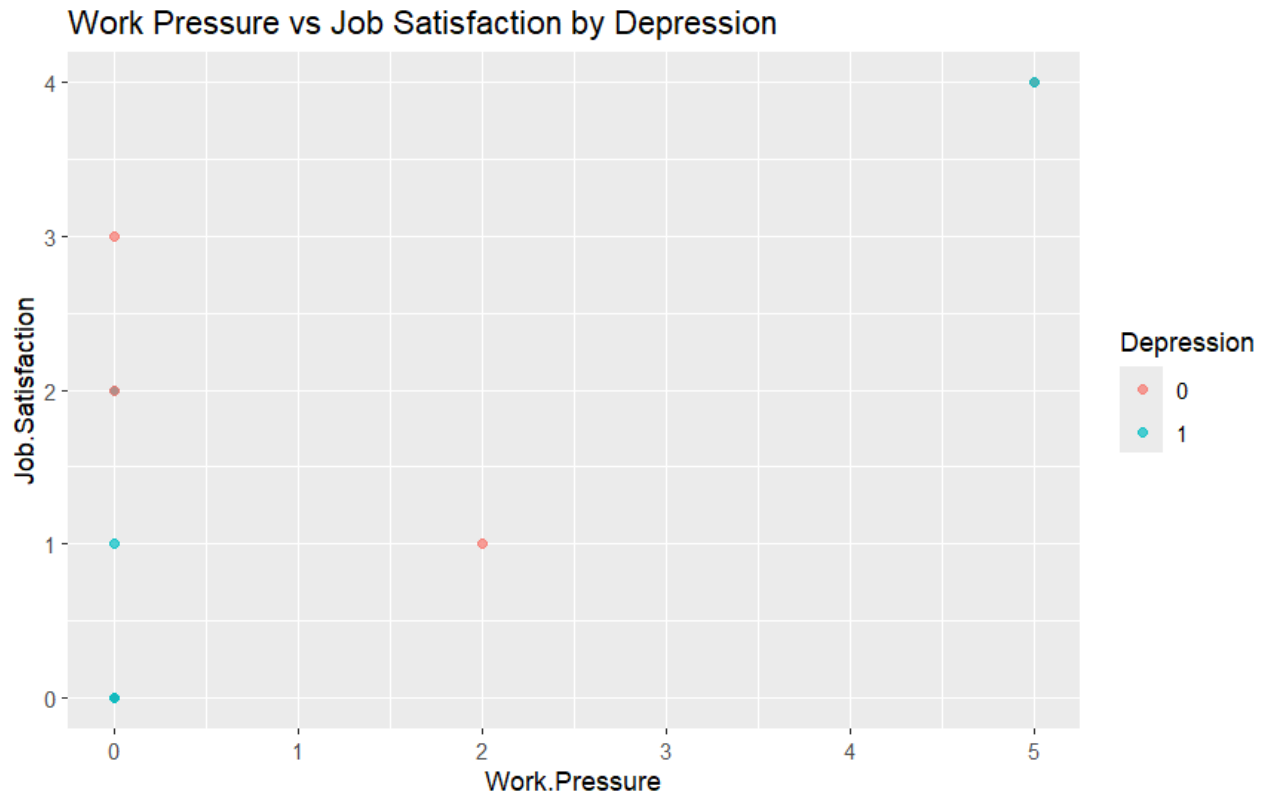












Task-2(Output)

Pearson Correlation

Pearson Correlation: id vs Age

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = 0.63182, df = 27899, p-value = 0.5275
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.007951607  0.015515817
sample estimates:
      cor
0.003782626
```

Pearson Correlation: id vs Academic.Pressure

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = 0.8639, df = 27899, p-value = 0.3877
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.006562234  0.016904897
sample estimates:
      cor
0.005172044
```

Pearson Correlation: id vs Work.Pressure

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = 0.21058, df = 27899, p-value = 0.8332
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.01047330  0.01299442
sample estimates:
      cor
0.001260738
```

Pearson Correlation: id vs CGPA

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -2.0587, df = 27899, p-value = 0.03954
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.0240545107 -0.0005903156
sample estimates:
      cor
-0.01232411
```

Pearson Correlation: id vs Study.Satisfaction

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = 1.3018, df = 27899, p-value = 0.193
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.003940698  0.019525635
sample estimates:
      cor
0.007793541
```

Pearson Correlation: id vs Job.Satisfaction

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = 0.32246, df = 27899, p-value = 0.7471
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.009803581  0.013664091
sample estimates:
      cor
0.001930521
```

Pearson Correlation: id vs Work.Study.Hours

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -0.74589, df = 27899, p-value = 0.4557
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.016198603 0.007268688
sample estimates:
cor
-0.004465572
```

Pearson Correlation: Age vs Academic.Pressure

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -12.698, df = 27899, p-value < 2.2e-16
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.08745955 -0.06412662
sample estimates:
cor
-0.07580346
```

Pearson Correlation: Age vs Work.Pressure

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = 0.33656, df = 27899, p-value = 0.7365
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.00971914 0.01374852
sample estimates:
cor
0.00201497
```

Pearson Correlation: Age vs CGPA

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = 0.84448, df = 27899, p-value = 0.3984
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.006678471 0.016788688
sample estimates:
cor
0.005055805
```

Pearson Correlation: Age vs Study.Satisfaction

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = 1.5427, df = 27899, p-value = 0.1229
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.002498733 0.020967024
sample estimates:
cor
0.009235417
```

Pearson Correlation: Age vs Job.Satisfaction

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -0.072124, df = 27899, p-value = 0.9425
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.01216562 0.01130214
sample estimates:
cor
-0.0004318002
```

Pearson Correlation: Age vs Work.Study.Hours

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -5.503, df = 27899, p-value = 3.768e-08
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.04464469 -0.02120237
sample estimates:
cor
-0.03292806
```

Pearson Correlation: Academic.Pressure vs Work.Pressure

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -3.7142, df = 27899, p-value = 0.0002043
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.03395611 -0.01049994
sample estimates:
cor
-0.02223108
```

Pearson Correlation: Academic.Pressure vs CGPA

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -3.7155, df = 27899, p-value = 0.0002032
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.03396387 -0.01050771
sample estimates:
cor
-0.02223885
```

Pearson Correlation: Academic.Pressure vs Study.Satisfaction

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -18.654, df = 27899, p-value < 2.2e-16
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.12256236 -0.09938365
sample estimates:
cor
-0.1109881
```

Pearson Correlation: Academic.Pressure vs Job.Satisfaction

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -4.1679, df = 27899, p-value = 3.084e-05
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.03666814 -0.01321498
sample estimates:
cor
-0.02494499
```

Pearson Correlation: Academic.Pressure vs Work.Study.Hours

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = 16.104, df = 27899, p-value < 2.2e-16
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
0.08433156 0.10758321
sample estimates:
cor
0.09597048
```

Pearson Correlation: Work.Pressure vs CGPA

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -8.5122, df = 27899, p-value < 2.2e-16
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 -0.06259261 -0.03918563
sample estimates:
      cor
-0.05089611
```

Pearson Correlation: Work.Pressure vs Study.Satisfaction

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -3.5327, df = 27899, p-value = 0.0004121
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 -0.03287091 -0.00941364
sample estimates:
      cor
-0.02114518
```

Pearson Correlation: Work.Pressure vs Job.Satisfaction

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = 201.99, df = 27899, p-value < 2.2e-16
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 0.7658436 0.7753745
sample estimates:
      cor
0.7706522
```

Pearson Correlation: Work.Pressure vs Work.Study.Hours

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -0.91336, df = 27899, p-value = 0.3611
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 -0.017200930 0.006266128
sample estimates:
      cor
-0.005468154
```

Pearson Correlation: CGPA vs Study.Satisfaction

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -7.3668, df = 27899, p-value = 1.797e-13
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 -0.05576665 -0.03234445
sample estimates:
      cor
-0.04406161
```

Pearson Correlation: CGPA vs Job.Satisfaction

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -8.9709, df = 27899, p-value < 2.2e-16
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 -0.06532404 -0.04192377
sample estimates:
      cor
-0.05363127
```


Pearson Correlation: CGPA vs Work.Study.Hours

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = 0.43498, df = 27899, p-value = 0.6636
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.009129961 0.014337638
sample estimates:
cor
0.002604197
```

Pearson Correlation: Study.Satisfaction vs Job.Satisfaction

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -3.6599, df = 27899, p-value = 0.0002527
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.03363188 -0.01017538
sample estimates:
cor
-0.02190664
```

Pearson Correlation: Study.Satisfaction vs Work.Study.Hours

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -6.0909, df = 27899, p-value = 1.138e-09
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.04815470 -0.02471811
sample estimates:
cor
-0.03644142
```

Pearson Correlation: Job.Satisfaction vs Work.Study.Hours

Pearson's product-moment correlation

```
data: numeric_data[[i]] and numeric_data[[j]]
t = -0.8723, df = 27899, p-value = 0.383
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
-0.016955211 0.006511908
sample estimates:
cor
-0.005222371
```

Anova

ANOVA: id ~ Gender

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Gender	1	1.055e+09	1.055e+09	0.639	0.424
Residuals	27899	4.608e+13	1.652e+09		

ANOVA: id ~ City

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
City	51	8.609e+10	1.688e+09	1.022	0.43
Residuals	27849	4.600e+13	1.652e+09		

ANOVA: id ~ Profession

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Profession	13	2.575e+10	1.981e+09	1.199	0.272
Residuals	27887	4.606e+13	1.652e+09		

ANOVA: id ~ Sleep.Duration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Sleep.Duration	4	5.945e+09	1.486e+09	0.9	0.463
Residuals	27896	4.608e+13	1.652e+09		

ANOVA: id ~ Dietary.Habits

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Dietary.Habits	3	5.477e+09	1.826e+09	1.105	0.345
Residuals	27897	4.608e+13	1.652e+09		

ANOVA: id ~ Degree

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Degree	27	3.470e+10	1.285e+09	0.778	0.786
Residuals	27873	4.605e+13	1.652e+09		

ANOVA: id ~ Have.you.ever.had.suicidal.thoughts..

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Have.you.ever.had.suicidal.thoughts..	1	1.027e+09	1.027e+09	0.622	0.43
Residuals	27899	4.608e+13	1.652e+09		

ANOVA: id ~ Financial.Stress

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Financial.Stress	5	1.239e+10	2.478e+09	1.501	0.186
Residuals	27895	4.607e+13	1.652e+09		

ANOVA: id ~ Family.History.of.Mental.Illness

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Family.History.of.Mental.Illness	1	1.384e+09	1.384e+09	0.838	0.36
Residuals	27899	4.608e+13	1.652e+09		

ANOVA: Age ~ Gender

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Gender	1	55	55.25	2.296	0.13
Residuals	27899	671380	24.06		

ANOVA: Age ~ City

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
City	51	8111	159.03	6.677	<2e-16 ***
Residuals	27849	663324	23.82		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Age ~ Profession

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Profession	13	260	20.02	0.832	0.626
Residuals	27887	671175	24.07		

ANOVA: Age ~ Sleep.Duration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Sleep.Duration	4	167	41.69	1.732	0.14
Residuals	27896	671268	24.06		

ANOVA: Age ~ Dietary.Habits

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Dietary.Habits	3	2679	892.8	37.24	<2e-16 ***
Residuals	27897	668756	24.0		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Age ~ Degree

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Degree	27	281504	10426	745.3	<2e-16 ***
Residuals	27873	389931	14		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Age ~ Have.you.ever.had.suicidal.thoughts..

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Have.you.ever.had.suicidal.thoughts..	1	8650	8650	364.1	<2e-16 ***
Residuals	27899	662785	24		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Age ~ Financial.Stress

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Financial.Stress	5	6356	1271.2	53.32	<2e-16 ***
Residuals	27895	665079	23.8		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Age ~ Family.History.of.Mental.Illness

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Family.History.of.Mental.Illness	1	16	15.87	0.659	0.417
Residuals	27899	671419	24.07		

ANOVA: Academic.Pressure ~ Gender

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Gender	1	26	26.294	13.78	0.000205 ***
Residuals	27899	53219	1.908		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Academic.Pressure ~ City

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
City	51	423	8.285	4.368	<2e-16 ***
Residuals	27849	52823	1.897		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Academic.Pressure ~ Profession

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Profession	13	20	1.502	0.787	0.675
Residuals	27887	53226	1.909		

ANOVA: Academic.Pressure ~ Sleep.Duration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Sleep.Duration	4	118	29.406	15.44	1.28e-12 ***
Residuals	27896	53128	1.905		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Academic.Pressure ~ Dietary.Habits

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Dietary.Habits	3	444	147.86	78.12	<2e-16 ***
Residuals	27897	52802	1.89		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Academic.Pressure ~ Degree

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Degree	27	460	17.019	8.987	<2e-16 ***
Residuals	27873	52786	1.894		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Academic.Pressure ~ Have.you.ever.had.suicidal.thoughts..

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Have.you.ever.had.suicidal.thoughts..	1	3641	3641	2048	<2e-16 ***
Residuals	27899	49604	2		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Academic.Pressure ~ Financial.Stress

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Financial.Stress	5	1236	247.24	132.6	<2e-16 ***
Residuals	27895	52009	1.86		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Academic.Pressure ~ Family.History.of.Mental.Illness

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Family.History.of.Mental.Illness	1	48	48.14	25.25	5.07e-07 ***
Residuals	27899	53197	1.91		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Work.Pressure ~ Gender

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Gender	1	0.00	0.004101	2.119	0.145
Residuals	27899	53.99	0.001935		

ANOVA: Work.Pressure ~ City

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
City	51	0.06	0.001121	0.579	0.993
Residuals	27849	53.94	0.001937		

ANOVA: Work.Pressure ~ Profession

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Profession	13	0.00	0.0000004	0	1
Residuals	27887	53.99	0.0019362		

ANOVA: Work.Pressure ~ Sleep.Duration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Sleep.Duration	4	0.01	0.001388	0.717	0.58
Residuals	27896	53.99	0.001935		

ANOVA: Work.Pressure ~ Dietary.Habits

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Dietary.Habits	3	0.00	0.001015	0.525	0.665
Residuals	27897	53.99	0.001935		

ANOVA: Work.Pressure ~ Degree

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Degree	27	0.02	0.000686	0.354	0.999
Residuals	27873	53.98	0.001937		

ANOVA: Work.Pressure ~ Have.you.ever.had.suicidal.thoughts..

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Have.you.ever.had.suicidal.thoughts..	1	0.00	0.0000544	0.028	0.867
Residuals	27899	53.99	0.0019354		

ANOVA: Work.Pressure ~ Financial.Stress

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Financial.Stress	5	0.01	0.001709	0.883	0.491
Residuals	27895	53.99	0.001935		

```
ANOVA: Work.Pressure ~ Family.History.of.Mental.Illness
              Df Sum Sq Mean Sq F value Pr(>F)
Family.History.of.Mental.Illness 1 0.00 0.002080 1.075 0.3
Residuals 27899 53.99 0.001935
```

```
-----
ANOVA: CGPA ~ Gender
              Df Sum Sq Mean Sq F value Pr(>F)
Gender 1 78 78.38 36.28 1.73e-09 ***
Residuals 27899 60269 2.16
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
-----
ANOVA: CGPA ~ City
              Df Sum Sq Mean Sq F value Pr(>F)
City 51 660 12.936 6.036 <2e-16 ***
Residuals 27849 59687 2.143
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
-----
ANOVA: CGPA ~ Profession
              Df Sum Sq Mean Sq F value Pr(>F)
Profession 13 17 1.342 0.62 0.84
Residuals 27887 60330 2.163
```

```
-----
ANOVA: CGPA ~ Sleep.Duration
              Df Sum Sq Mean Sq F value Pr(>F)
Sleep.Duration 4 29 7.336 3.393 0.00881 **
Residuals 27896 60318 2.162
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
-----
ANOVA: CGPA ~ Dietary.Habits
              Df Sum Sq Mean Sq F value Pr(>F)
Dietary.Habits 3 1 0.2196 0.101 0.959
Residuals 27897 60346 2.1632
```

```
ANOVA: CGPA ~ Degree
              Df Sum Sq Mean Sq F value Pr(>F)
Degree 27 352 13.037 6.057 <2e-16 ***
Residuals 27873 59995 2.152
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
-----
ANOVA: CGPA ~ Have.you.ever.had.suicidal.thoughts..
              Df Sum Sq Mean Sq F value Pr(>F)
Have.you.ever.had.suicidal.thoughts.. 1 4 4.373 2.022 0.155
Residuals 27899 60343 2.163
```

```
-----
ANOVA: CGPA ~ Financial.Stress
              Df Sum Sq Mean Sq F value Pr(>F)
Financial.Stress 5 13 2.584 1.195 0.309
Residuals 27895 60334 2.163
```

```
-----
ANOVA: CGPA ~ Family.History.of.Mental.Illness
              Df Sum Sq Mean Sq F value Pr(>F)
Family.History.of.Mental.Illness 1 1 0.8497 0.393 0.531
Residuals 27899 60346 2.1630
```

```
-----
ANOVA: Study.Satisfaction ~ Gender
              Df Sum Sq Mean Sq F value Pr(>F)
Gender 1 13 12.886 6.957 0.00836 **
Residuals 27899 51678 1.852
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
-----
ANOVA: Study.Satisfaction ~ City
              Df Sum Sq Mean Sq F value Pr(>F)
City 51 243 4.773 2.584 4.8e-09 ***
Residuals 27849 51448 1.847
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```

ANOVA: Study.Satisfaction ~ Profession
      Df Sum Sq Mean Sq F value Pr(>F)
Profession    13    23    1.774   0.958   0.491
Residuals   27887   51668    1.853
-----

ANOVA: Study.Satisfaction ~ Sleep.Duration
      Df Sum Sq Mean Sq F value Pr(>F)
Sleep.Duration    4    11    2.812   1.518   0.194
Residuals   27896   51680    1.853
-----

ANOVA: Study.Satisfaction ~ Dietary.Habits
      Df Sum Sq Mean Sq F value Pr(>F)
Dietary.Habits    3    35   11.699   6.318 0.00028 ***
Residuals   27897   51656    1.852
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Study.Satisfaction ~ Degree
      Df Sum Sq Mean Sq F value Pr(>F)
Degree    27   288   10.659   5.78 <2e-16 ***
Residuals 27873  51403    1.844
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Study.Satisfaction ~ Have.you.ever.had.suicidal.thoughts..
      Df Sum Sq Mean Sq F value Pr(>F)
Have.you.ever.had.suicidal.thoughts..    1    360   360.3   195.8 <2e-16 ***
Residuals   27899   51331    1.8
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Study.Satisfaction ~ Financial.Stress
      Df Sum Sq Mean Sq F value Pr(>F)
Financial.Stress    5    276   55.22   29.96 <2e-16 ***
Residuals   27895   51415    1.84
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

ANOVA: Study.Satisfaction ~ Family.History.of.Mental.Illness
      Df Sum Sq Mean Sq F value Pr(>F)
Family.History.of.Mental.Illness    1    1    0.7781    0.42   0.517
Residuals   27899   51690    1.8528
-----

ANOVA: Job.Satisfaction ~ Gender
      Df Sum Sq Mean Sq F value Pr(>F)
Gender    1    0.00  0.002829    1.435   0.231
Residuals 27899   54.98  0.001971
-----

ANOVA: Job.Satisfaction ~ City
      Df Sum Sq Mean Sq F value Pr(>F)
City    51    0.05  0.001014    0.514   0.998
Residuals 27849   54.94  0.001973
-----

ANOVA: Job.Satisfaction ~ Profession
      Df Sum Sq Mean Sq F value Pr(>F)
Profession    13    0.00  0.0000011    0.001    1
Residuals   27887   54.99  0.0019718
-----

ANOVA: Job.Satisfaction ~ Sleep.Duration
      Df Sum Sq Mean Sq F value Pr(>F)
Sleep.Duration    4    0.00  0.0005079    0.258   0.905
Residuals   27896   54.99  0.0019711
-----

ANOVA: Job.Satisfaction ~ Dietary.Habits
      Df Sum Sq Mean Sq F value Pr(>F)
Dietary.Habits    3    0.00  0.0009666    0.49   0.689
Residuals   27897   54.98  0.0019710
-----

ANOVA: Job.Satisfaction ~ Degree
      Df Sum Sq Mean Sq F value Pr(>F)
Degree    27    0.04  0.001571    0.797   0.761
Residuals 27873   54.94  0.001971
-----

ANOVA: Job.Satisfaction ~ Have.you.ever.had.suicidal.thoughts..
      Df Sum Sq Mean Sq F value Pr(>F)
Have.you.ever.had.suicidal.thoughts..    1    0.00  0.0006315    0.32   0.571
Residuals   27899   54.99  0.0019709
-----

ANOVA: Job.Satisfaction ~ Financial.Stress
      Df Sum Sq Mean Sq F value Pr(>F)
Financial.Stress    5    0.01  0.001070    0.543   0.744
Residuals   27895   54.98  0.001971

```

```

ANOVA: Job.Satisfaction ~ Family.History.of.Mental.Illness
              Df Sum Sq Mean Sq F value Pr(>F)
Family.History.of.Mental.Illness  1    0.01  0.005508    2.795 0.0946 .
Residuals                27899   54.98  0.001971
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

-----
ANOVA: Work.Study.Hours ~ Gender
              Df Sum Sq Mean Sq F value Pr(>F)
Gender          1     65    64.89   4.721 0.0298 *
Residuals      27899 383466    13.74
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

-----
ANOVA: Work.Study.Hours ~ City
              Df Sum Sq Mean Sq F value Pr(>F)
City           51   1164    22.82   1.662 0.00211 **
Residuals      27849 382367    13.73
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

-----
ANOVA: Work.Study.Hours ~ Profession
              Df Sum Sq Mean Sq F value Pr(>F)
Profession      13     207    15.95   1.16  0.302
Residuals      27887 383323    13.75
---

-----
ANOVA: Work.Study.Hours ~ Sleep.Duration
              Df Sum Sq Mean Sq F value Pr(>F)
Sleep.Duration   4     785   196.36  14.31 1.13e-11 ***
Residuals      27896 382745    13.72
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

-----
ANOVA: Work.Study.Hours ~ Dietary.Habits
              Df Sum Sq Mean Sq F value Pr(>F)
Dietary.Habits   3     423   141.06  10.27 9.37e-07 ***
Residuals      27897 383107    13.73
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

-----
ANOVA: Work.Study.Hours ~ Degree
              Df Sum Sq Mean Sq F value Pr(>F)
Degree           27     757    28.04   2.042 0.00112 **
Residuals      27873 382773    13.73
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

-----
ANOVA: Work.Study.Hours ~ Have.you.ever.had.suicidal.thoughts..
              Df Sum Sq Mean Sq F value Pr(>F)
Have.you.ever.had.suicidal.thoughts..  1   5644   5644  416.7 <2e-16 ***
Residuals                27899  377886    14
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

-----
ANOVA: Work.Study.Hours ~ Financial.Stress
              Df Sum Sq Mean Sq F value Pr(>F)
Financial.Stress  5   2305   461.0  33.73 <2e-16 ***
Residuals      27895 381226    13.7
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

-----
ANOVA: Work.Study.Hours ~ Family.History.of.Mental.Illness
              Df Sum Sq Mean Sq F value Pr(>F)
Family.History.of.Mental.Illness  1    117   116.57   8.482 0.00359 **
Residuals                27899  383414    13.74
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Chi-Square test

```
> print("Chi-squared Test Summary:")
[1] "Chi-squared Test Summary:"
> print(chi_table)
```

	Feature_Pair	Df	Chi_Sq	P_Value
df	Gender vs City	NA	378.11	0.00010
df1	Gender vs Profession	NA	16.31	0.14049
df2	Gender vs Sleep.Duration	NA	5.10	0.27787
df3	Gender vs Dietary.Habits	NA	115.46	0.00010
df4	Gender vs Degree	NA	322.12	0.00010
df5	Gender vs Have.you.ever.had.suicidal.thoughts..	NA	0.04	0.84032
df6	Gender vs Financial.Stress	NA	3.51	0.63284
df7	Gender vs Family.History.of.Mental.Illness	NA	6.93	0.00880
df8	City vs Profession	NA	383.10	0.42046
df9	City vs Sleep.Duration	NA	260.87	0.01780
df10	City vs Dietary.Habits	NA	319.53	0.01270
df11	City vs Degree	NA	4869.89	0.00010
df12	City vs Have.you.ever.had.suicidal.thoughts..	NA	84.90	0.00020
df13	City vs Financial.Stress	NA	350.37	0.00270
df14	City vs Family.History.of.Mental.Illness	NA	87.44	0.00020
df15	Profession vs Sleep.Duration	NA	39.36	0.44516
df16	Profession vs Dietary.Habits	NA	27.96	0.31697
df17	Profession vs Degree	NA	507.53	0.04150
df18	Profession vs Have.you.ever.had.suicidal.thoughts..	NA	11.76	0.61114
df19	Profession vs Financial.Stress	NA	44.62	0.90271
df20	Profession vs Family.History.of.Mental.Illness	NA	13.07	0.47725
df21	Sleep.Duration vs Dietary.Habits	NA	25.34	0.01590
df22	Sleep.Duration vs Degree	NA	191.70	0.00070
df23	Sleep.Duration vs Have.you.ever.had.suicidal.thoughts..	NA	133.41	0.00010
df24	Sleep.Duration vs Financial.Stress	NA	71.62	0.00160
df25	Sleep.Duration vs Family.History.of.Mental.Illness	NA	5.14	0.27007
df26	Dietary.Habits vs Degree	NA	248.47	0.00020
df27	Dietary.Habits vs Have.you.ever.had.suicidal.thoughts..	NA	359.70	0.00010
df28	Dietary.Habits vs Financial.Stress	NA	243.57	0.00150
df29	Dietary.Habits vs Family.History.of.Mental.Illness	NA	4.37	0.22678
df30	Degree vs Have.you.ever.had.suicidal.thoughts..	NA	150.30	0.00010
df31	Degree vs Financial.Stress	NA	268.52	0.00330
df32	Degree vs Family.History.of.Mental.Illness	NA	48.36	0.00620
df33	Have.you.ever.had.suicidal.thoughts.. vs Financial.Stress	NA	1236.16	0.00010
df34	Have.you.ever.had.suicidal.thoughts.. vs Family.History.of.Mental.Illness	NA	19.17	0.00010
df35	Financial.Stress vs Family.History.of.Mental.Illness	NA	29.44	0.00010

Mutual Information

```
> print("Mutual Information Scores with Depression:")
[1] "Mutual Information Scores with Depression:"
> print(mi_df)
```

	Feature	MI_with_Depression
Have.you.ever.had.suicidal.thoughts..	Have.you.ever.had.suicidal.thoughts..	0.1546
Academic.Pressure	Academic.Pressure	0.0839
Financial.Stress	Financial.Stress	0.0687
Age	Age	0.0222
Dietary.Habits	Dietary.Habits	0.0218
Work.Study.Hours	Work.Study.Hours	0.0166
Study.Satisfaction	Study.Satisfaction	0.0126
Degree	Degree	0.0098
Sleep.Duration	Sleep.Duration	0.0050
City	City	0.0035
Family.History.of.Mental.Illness	Family.History.of.Mental.Illness	0.0014
Profession	Profession	0.0004
CGPA	CGPA	0.0002
id	id	0.0000
Gender	Gender	0.0000
Work.Pressure	Work.Pressure	0.0000
Job.Satisfaction	Job.Satisfaction	0.0000