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ods graphics on;
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```
Title 'SAS Program for smoke type groups on avg glucose level CRD';
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Options Linesize = 70;
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Data Table;
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```
Input X1 $ X3 @@;
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Label X1 = 'X1 - smoker_type'
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X3 = 'X3 - avg_glucose_level'
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Datalines;
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formerly_smoked 253.93
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formerly_smoked 112.95
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formerly_smoked 86.91
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formerly_smoked 223.35
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formerly_smoked 63.16
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formerly_smoked 71.79
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formerly_smoked 72.94
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formerly_smoked 93.71
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formerly_smoked 244.28
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formerly_smoked 167.59
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formerly_smoked 88.65
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formerly_smoked 112.33
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formerly_smoked 103.55
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formerly_smoked 110.36
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formerly_smoked 97.86
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formerly_smoked 55.57
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formerly_smoked 57.02
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formerly_smoked 88.66
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formerly_smoked 91.65
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formerly_smoked 219.8
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formerly_smoked 57.17
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formerly_smoked 208.39
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formerly_smoked 60.34
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formerly_smoked 85.64
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formerly_smoked 58.29
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formerly_smoked 217.94
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formerly_smoked 157.67
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formerly_smoked 72.08
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formerly_smoked 88.81
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formerly_smoked 79.92
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formerly_smoked 78.92
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formerly_smoked 227.89
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formerly_smoked 105.72
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formerly_smoked 72.2
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formerly_smoked 103.43
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formerly_smoked 239.64
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formerly_smoked 61.94
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formerly_smoked 95.07
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formerly_smoked 85.62
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formerly_smoked 95.16
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formerly_smoked 121.17
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formerly_smoked 103.44
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formerly_smoked 80.88
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formerly_smoked 118.82
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formerly_smoked	96.75
formerly_smoked	112.98
formerly_smoked	80.01
formerly_smoked	59.74
formerly_smoked	160.87
formerly_smoked	83.6
formerly_smoked	107.33
formerly_smoked	62.57
formerly_smoked	143.47
formerly_smoked	62.99
formerly_smoked	73.56
formerly_smoked	83.84
formerly_smoked	98.44
formerly_smoked	219.5
formerly_smoked	200.73
formerly_smoked	72.49
formerly_smoked	74.23
formerly_smoked	87.24
formerly_smoked	93.93
formerly_smoked	94.24
formerly_smoked	89.95
formerly_smoked	75.53
formerly_smoked	73.36
formerly_smoked	235.06
formerly_smoked	108.56
formerly_smoked	75.28
formerly_smoked	200.59
formerly_smoked	99.76
formerly_smoked	106.97
formerly_smoked	58.24
formerly_smoked	77.53
formerly_smoked	78.93
formerly_smoked	85.03
formerly_smoked	96.25
formerly_smoked	99.44
formerly_smoked	84.46
formerly_smoked	208.2
formerly_smoked	215.94
formerly_smoked	65.7
formerly_smoked	217.66
formerly_smoked	111.99
formerly_smoked	101.19
formerly_smoked	203.44
formerly_smoked	81
formerly_smoked	255.17
formerly_smoked	58.23
formerly_smoked	215.33
formerly_smoked	100.12
formerly_smoked	216.19
formerly_smoked	99.64
formerly_smoked	76.12
formerly_smoked	205.01
formerly_smoked	110.6
formerly_smoked	94.76
formerly_smoked	182.22
formerly_smoked	118.22

never_smoked	155.23
never_smoked	66.13
never_smoked	79.53
never_smoked	59.62
never_smoked	166.38
never_smoked	65.66
never_smoked	231.15
never_smoked	73.02
never_smoked	187.52
never_smoked	77.67
never_smoked	62.41
never_smoked	60.36
never_smoked	111.73
never_smoked	197.54
never_smoked	223.14
never_smoked	81.1
never_smoked	82.37
never_smoked	64.99
never_smoked	84.1
never_smoked	99.65
never_smoked	80.28
never_smoked	192.5
never_smoked	101.35
never_smoked	124.37
never_smoked	194.04
never_smoked	73.71
never_smoked	112.62
never_smoked	99.94
never_smoked	192.47
never_smoked	74.72
never_smoked	100.93
never_smoked	87.33
never_smoked	111.85
never_smoked	124.45
never_smoked	153.38
never_smoked	76.82
never_smoked	146.08
never_smoked	89.61
never_smoked	90.11
never_smoked	72.13
never_smoked	78.24
never_smoked	83.78
never_smoked	84.66
never_smoked	204.92
never_smoked	244.3
never_smoked	88.88
never_smoked	107.5
never_smoked	115.07
never_smoked	176.78
never_smoked	85.59
never_smoked	76.98
never_smoked	64.4
never_smoked	206.33
never_smoked	74.8
never_smoked	183.87
never_smoked	216.07

never_smoked	100.97
never_smoked	90.55
never_smoked	82.81
never_smoked	115.99
never_smoked	65.93
never_smoked	64.17
never_smoked	104.86
never_smoked	123.04
never_smoked	133.58
never_smoked	85.17
never_smoked	69.11
never_smoked	86.39
never_smoked	120.06
never_smoked	105.52
never_smoked	237.74
never_smoked	79.98
never_smoked	73.04
never_smoked	88
never_smoked	68.68
never_smoked	131.41
never_smoked	129.43
never_smoked	67.07
never_smoked	107.42
never_smoked	74.29
never_smoked	93.93
never_smoked	117.69
never_smoked	59.43
never_smoked	69.17
never_smoked	115.93
never_smoked	113.85
never_smoked	211.12
never_smoked	266.59
never_smoked	56.63
never_smoked	92.59
never_smoked	158.33
never_smoked	92.13
never_smoked	70.28
never_smoked	96.18
never_smoked	98.91
never_smoked	87.49
never_smoked	83.88
never_smoked	105.77
never_smoked	197.11
never_smoked	91.61
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smokes	116.62
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smokes	96.29
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smokes	83.76
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smokes	200.49
smokes	113.4
smokes	91.93
smokes	106.01
smokes	72.79
smokes	66.01
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smokes	111.79
smokes	89.18
smokes	83.61
smokes	82.47
smokes	104.55
smokes	74.81
smokes	93.23
smokes	83.1
smokes	97.6
smokes	87.26
smokes	100.2
smokes	110.55
smokes	121.66
smokes	82.72
smokes	82.44
smokes	102.4
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smokes	82.46
smokes	87.85
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smokes	198.36
smokes	79.73
smokes	111.61
smokes	114.32
smokes	56.12
smokes	103.15
smokes	65.12
smokes	90.31
smokes	82.09
smokes	55.47
smokes	80.88
smokes	229.86
smokes	82.02
smokes	216
smokes	133.24
smokes	111.1
smokes	73.54
smokes	154.03
smokes	101.81
smokes	103.08
smokes	83.01
smokes	87.62
smokes	95.75
smokes	226.93

smokes	101.76
smokes	71.71
smokes	64.4
smokes	160.76
smokes	73.75
smokes	85.53
smokes	74.11
smokes	69.88
smokes	219.39
smokes	69.23
smokes	92.32
smokes	99.69
smokes	88.2
smokes	72.53
smokes	80.86
smokes	100.31
smokes	162.24
smokes	113.05
smokes	73.07
smokes	101.81
smokes	77.99
smokes	81.38
smokes	101.41
smokes	81.6
smokes	193.94
smokes	124.64
smokes	56.96
smokes	57.33
smokes	70.53
smokes	73.48
smokes	72.96
smokes	87.1
formerly_smoked	63.41
formerly_smoked	76.46
formerly_smoked	94.65
formerly_smoked	78.29
formerly_smoked	85.04
formerly_smoked	77.55
formerly_smoked	65.42
formerly_smoked	237.75
formerly_smoked	60.22
formerly_smoked	92.99
formerly_smoked	75.77
formerly_smoked	222.52
formerly_smoked	58.69
formerly_smoked	115.52
formerly_smoked	89.18
formerly_smoked	67.29
formerly_smoked	106.08
formerly_smoked	93.72
formerly_smoked	111.37
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formerly_smoked	97.47
formerly_smoked	204.98
formerly_smoked	62.46
formerly_smoked	62.62

formerly_smoked	216.7
formerly_smoked	221.06
formerly_smoked	68.76
formerly_smoked	102.87
formerly_smoked	96.84
formerly_smoked	106.53
formerly_smoked	77.99
formerly_smoked	97.58
formerly_smoked	234.35
formerly_smoked	75.13
formerly_smoked	223.83
formerly_smoked	106.52
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formerly_smoked	185.17
formerly_smoked	109.65
formerly_smoked	83.07
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formerly_smoked	238.78
formerly_smoked	70.16
formerly_smoked	83.97
formerly_smoked	58.42
formerly_smoked	84.48
formerly_smoked	197.28
formerly_smoked	109.59
formerly_smoked	87.81
formerly_smoked	72.02
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formerly_smoked	106.83
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formerly_smoked	120.94
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formerly_smoked	116.66
formerly_smoked	79.34
formerly_smoked	117.63
formerly_smoked	63.32
formerly_smoked	101.46
formerly_smoked	105.28
formerly_smoked	69.26
formerly_smoked	74.12
formerly_smoked	65.66
formerly_smoked	81.99
formerly_smoked	61.8
formerly_smoked	89.21
formerly_smoked	84.09
formerly_smoked	82.71
formerly_smoked	57.82
formerly_smoked	186.21
formerly_smoked	226.11
formerly_smoked	81.96

formerly_smoked	83.3
formerly_smoked	114.5
formerly_smoked	83.89
formerly_smoked	116.2
formerly_smoked	170.22
formerly_smoked	125.11
formerly_smoked	56.48
formerly_smoked	57.89
formerly_smoked	74.7
formerly_smoked	216.64
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formerly_smoked	74.14
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formerly_smoked	88.41
formerly_smoked	229.2
formerly_smoked	220.36
formerly_smoked	63.71
never_smoked	86.97
never_smoked	195.25
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never_smoked	131.43
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never_smoked	123.94
never_smoked	116.23
never_smoked	141.37
never_smoked	112.96
never_smoked	71.08
never_smoked	145.23
never_smoked	75.95
never_smoked	83.51
never_smoked	267.6
never_smoked	76.19
never_smoked	89.22
never_smoked	105.51
never_smoked	62.48
never_smoked	91.46
never_smoked	65.69
never_smoked	145.25
never_smoked	83.85
never_smoked	61.11



never_smoked	231.76
never_smoked	99.48
never_smoked	226.98
never_smoked	172.86
never_smoked	65.42
never_smoked	110.38
never_smoked	80.4
never_smoked	69.24
never_smoked	80
never_smoked	209.5
never_smoked	100.8
never_smoked	79.58
never_smoked	94.19
never_smoked	70.61
never_smoked	109.46
never_smoked	77.95
never_smoked	95.52
never_smoked	90.51
never_smoked	133.82
never_smoked	82.18
never_smoked	71.3
never_smoked	185.27
never_smoked	67.92
never_smoked	80.97
never_smoked	91.01
never_smoked	81.68
never_smoked	249.31
never_smoked	87.4
never_smoked	86.06
never_smoked	70.11
never_smoked	69.4
never_smoked	74.91
never_smoked	75.04
never_smoked	98.05
never_smoked	80.08
never_smoked	96.02
never_smoked	119.52
never_smoked	85.84
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never_smoked	76.93
never_smoked	99.92
never_smoked	78.18
never_smoked	204.63
never_smoked	122.25
never_smoked	106.56
never_smoked	56.42
never_smoked	90.6
never_smoked	119.13
never_smoked	93.05
never_smoked	89.68
never_smoked	111.48
never_smoked	68.72
never_smoked	66.3
never_smoked	78.29
never_smoked	98.02
never_smoked	84.31

never_smoked	93.9
never_smoked	82.64
never_smoked	107.82
never_smoked	93.8
never_smoked	65.16
never_smoked	64.45
never_smoked	107.46
never_smoked	96.98
smokes	77.75
smokes	67.78
smokes	129.54
smokes	78.49
smokes	57.76
smokes	76.68
smokes	103.45
smokes	240.59
smokes	87.88
smokes	142.64
smokes	83.16
smokes	82.53
smokes	66.55
smokes	193.22
smokes	202.05
smokes	200.66
smokes	127.21
smokes	93.6
smokes	250.89
smokes	73.78
smokes	84.4
smokes	101.12
smokes	87.72
smokes	90.95
smokes	95.66
smokes	123.65
smokes	173.14
smokes	86.55
smokes	100.88
smokes	83.1
smokes	72.33
smokes	135.75
smokes	133.76
smokes	222.21
smokes	59.31
smokes	77.77
smokes	61.32
smokes	122.48
smokes	77.93
smokes	92.75
smokes	242.84
smokes	96.3
smokes	89.98
smokes	90.73
smokes	221.29
smokes	65.41
smokes	70.73
smokes	225.35

smokes	100.54
smokes	90.61
smokes	70.56
smokes	93.96
smokes	254.95
smokes	97.73
smokes	217.55
smokes	64.41
smokes	131.19
smokes	107.06
smokes	87.12
smokes	85.18
smokes	63.82
smokes	59.26
smokes	242.3
smokes	80.35
smokes	93.51
smokes	206.66
smokes	75.5
smokes	78.29
smokes	122.41
smokes	110.47
smokes	94.96
smokes	145.18
smokes	58.09
smokes	105.63
smokes	206.52
smokes	97.95
smokes	191.48
smokes	81.25
smokes	91.23
smokes	61.45
smokes	100.42
smokes	81.76
smokes	82.61
smokes	139.9
smokes	118.85
smokes	102.16
smokes	108.82
smokes	95.57
smokes	144.16
smokes	60.06
smokes	89.68
smokes	60.77
smokes	102.07
smokes	57.51
smokes	114.33
smokes	112.77
smokes	60.69
smokes	79.83
smokes	86.99
smokes	116.85
formerly_smoked	194.37
formerly_smoked	89.45
formerly_smoked	86.05
formerly_smoked	252.72

formerly_smoked	56.31
formerly_smoked	84.79
formerly_smoked	68.84
formerly_smoked	236.79
formerly_smoked	207.64
formerly_smoked	71.15
formerly_smoked	207.96
formerly_smoked	59.68
formerly_smoked	94.45
formerly_smoked	103.37
formerly_smoked	70.29
formerly_smoked	209.15
formerly_smoked	105.76
formerly_smoked	101.22
formerly_smoked	79.3
formerly_smoked	87.41
formerly_smoked	87.15
formerly_smoked	214.51
formerly_smoked	81.15
formerly_smoked	228.92
formerly_smoked	111.81
formerly_smoked	169.43
formerly_smoked	70.73
formerly_smoked	261.67
formerly_smoked	87.16
formerly_smoked	89.73
formerly_smoked	208.31
formerly_smoked	102.73
formerly_smoked	96.04
formerly_smoked	79.69
formerly_smoked	104.07
formerly_smoked	56.11
formerly_smoked	99.15
formerly_smoked	112.64
formerly_smoked	202.21
formerly_smoked	111.98
formerly_smoked	188.13
formerly_smoked	114.01
formerly_smoked	81.54
formerly_smoked	83.12
formerly_smoked	78.7
formerly_smoked	180.63
formerly_smoked	119.3
formerly_smoked	115.91
formerly_smoked	77.46
formerly_smoked	107.47
formerly_smoked	91.85
formerly_smoked	75.46
formerly_smoked	90.9
formerly_smoked	227.23
formerly_smoked	69.15
formerly_smoked	143.15
formerly_smoked	223.68
formerly_smoked	196.08
formerly_smoked	79.14
formerly_smoked	95.36

formerly_smoked	197.58
formerly_smoked	179.67
formerly_smoked	200.28
formerly_smoked	195.71
formerly_smoked	80.18
formerly_smoked	103.17
formerly_smoked	155.32
formerly_smoked	189.82
formerly_smoked	111.33
formerly_smoked	226.88
formerly_smoked	227.81
formerly_smoked	103.21
formerly_smoked	106.41
formerly_smoked	98.14
formerly_smoked	75.93
formerly_smoked	70.22
formerly_smoked	77.44
formerly_smoked	160
formerly_smoked	60.67
formerly_smoked	202.51
formerly_smoked	69.28
formerly_smoked	85.82
formerly_smoked	134.39
formerly_smoked	137.74
formerly_smoked	230.74
formerly_smoked	199.84
formerly_smoked	65.46
formerly_smoked	93.13
formerly_smoked	231.19
formerly_smoked	88.62
formerly_smoked	80.42
formerly_smoked	124.34
formerly_smoked	91.02
formerly_smoked	116.78
formerly_smoked	195.03
formerly_smoked	64.66
formerly_smoked	97.68
formerly_smoked	87.5
formerly_smoked	162.14
formerly_smoked	70.87
never_smoked	88.68
never_smoked	82.81
never_smoked	85.82
never_smoked	94.64
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never_smoked	192.16

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never_smoked	82.35
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never_smoked	204.77
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never_smoked	74.36
never_smoked	90.43
never_smoked	210.23
never_smoked	78.14
never_smoked	190.92
never_smoked	103.6
never_smoked	60.73
never_smoked	211.58
never_smoked	205.84
never_smoked	57.42
never_smoked	94.89
never_smoked	59.2
never_smoked	93.6
never_smoked	70.23
never_smoked	156.45
never_smoked	79.77
never_smoked	111.36
never_smoked	115.03
never_smoked	192.37
never_smoked	228.2
never_smoked	174.12
never_smoked	142.12
never_smoked	74.32
never_smoked	68.4
never_smoked	193.61
never_smoked	69.12
never_smoked	70.94
never_smoked	194.99
never_smoked	72.49
never_smoked	90.44
never_smoked	62.67
never_smoked	82.33
never_smoked	71.08
never_smoked	212.19
never_smoked	124.16
never_smoked	108.64
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never_smoked	60.94
never_smoked	56.07
never_smoked	103.29
never_smoked	163.82
never_smoked	223.26
never_smoked	65.3
never_smoked	56.75
never_smoked	96.82
never_smoked	95.08
never_smoked	202.06
never_smoked	69.88
never_smoked	169.74
never_smoked	238.53

never_smoked	82.99
never_smoked	76.57
never_smoked	66.16
never_smoked	77.12
never_smoked	68.53
never_smoked	110.78
never_smoked	224.63
never_smoked	100.96
never_smoked	124.13
never_smoked	57.28
never_smoked	124.78
never_smoked	77.29
never_smoked	215.81
never_smoked	98.09
never_smoked	213.92
never_smoked	209.58
never_smoked	217.3
never_smoked	74.96
never_smoked	83.7
never_smoked	161.95
never_smoked	191.33
never_smoked	69.61
never_smoked	109.47
never_smoked	167.41
never_smoked	67.03
never_smoked	80.63
never_smoked	251.6
never_smoked	88.97
smokes	132.08
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smokes	114.45
smokes	73.41
smokes	110.33
smokes	93.17
smokes	139.87
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smokes	72.09
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smokes	160.64
smokes	209.9
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smokes	68.44
smokes	128.04
smokes	135.19
smokes	67.06
smokes	251.46
smokes	83.64
smokes	229.92
smokes	82.85
smokes	94.71
smokes	103.69
smokes	95.01
smokes	84.43

smokes	97.99
smokes	85.92
smokes	99.83
smokes	93.58
smokes	76.11
smokes	65.71
smokes	70.43
smokes	62.93
smokes	201.45
smokes	239.95
smokes	114.54
smokes	90.38
smokes	142.31
smokes	55.32
smokes	76.09
smokes	123.08
smokes	60.77
smokes	195.23
smokes	101.57
smokes	68.37
smokes	248.24
smokes	92.9
smokes	69.76
smokes	65.84
smokes	240.69
smokes	85.51
smokes	73.72
smokes	82.62
smokes	109.09
smokes	231.43
smokes	90.06
smokes	67.97
smokes	199.86
smokes	98.39
smokes	142.63
smokes	80.92
smokes	111.15
smokes	77.82
smokes	93.2
smokes	97.53
smokes	113.74
smokes	111.38
smokes	104.23
smokes	61.94
smokes	83.88
smokes	105.59
smokes	95.44
smokes	100.49
smokes	75.25
smokes	249.29
smokes	94.75
smokes	267.61
smokes	232.89
smokes	83.07
smokes	74.33
smokes	105.88



smokes	90.43
smokes	95.49
smokes	191.82
smokes	136.81
smokes	73.57
smokes	106.43
smokes	61.1
smokes	69.18
smokes	243.73
smokes	57.83
smokes	101.85
smokes	114.47
smokes	118.03
smokes	63.72
smokes	248.37
smokes	88.83

```
Proc Print Data = Table;
```

```
Proc Sort Data = Table;
```

```
By X1;
```

```
Proc Univariate Data = Table Normal Plot;
```

```
Var X3;
```

```
By X1;
```

```
ID X1;
```

```
* Performing Basic CRD test;
```

```
Proc GLM Data = Table;
```

```
Class X1;
```

```
Model X3=X1;
```

```
Means X1;
```

```
Means X1/hovtest welch;
```

```
Means X1/regwq hovtest = bf;
```

```
Means X1/ LSD bon cldiff tukey;
```

```
Run;
```

```
ods pdf close;
```

```
Quit;
```