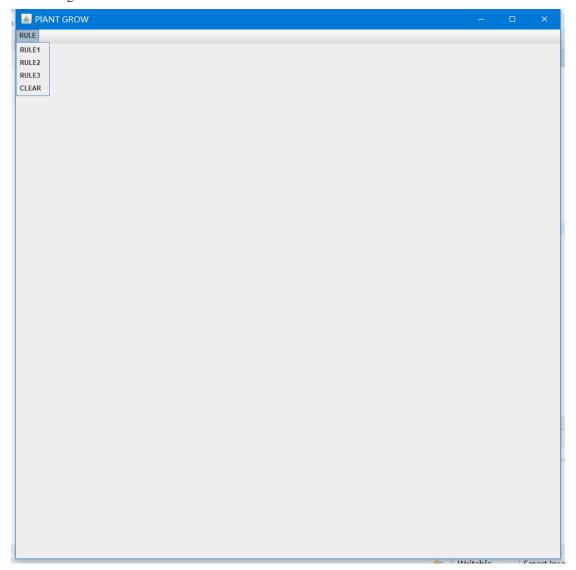
Output of Assignment 5a

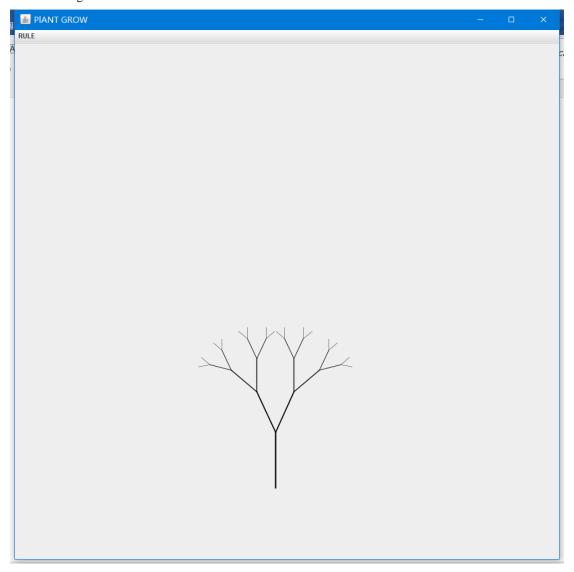
Yixuan Wang

Part A: Graphics of Interface and 3 Trees Growing

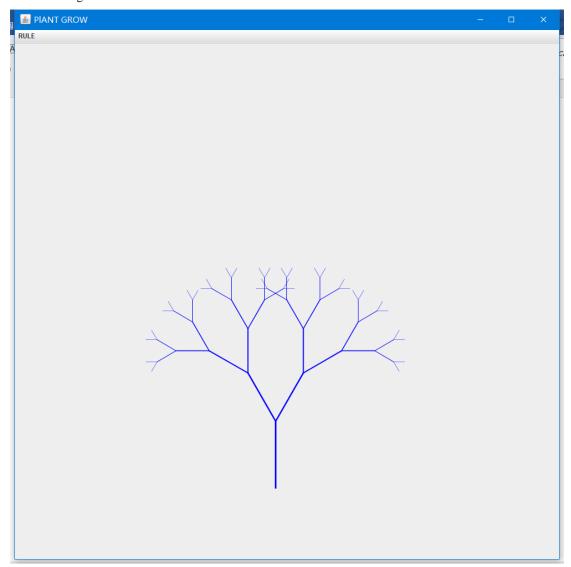
1. Starting Interface and Menu



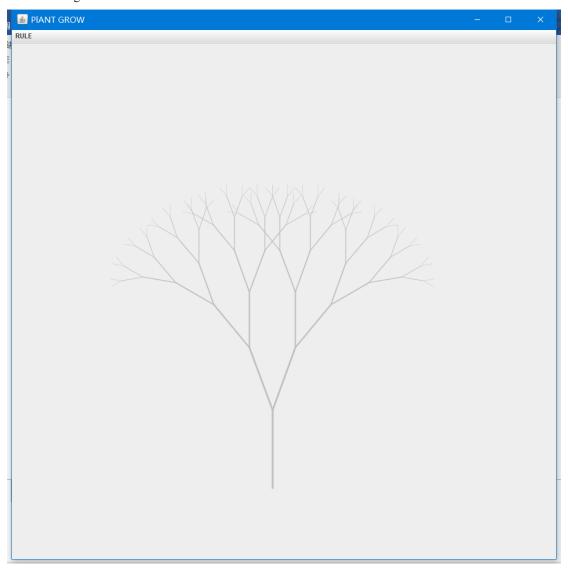
2. Tree Image of RULE1



3. Tree Image of RULE2



4. Tree Image of RULE3



Part B: Output of Generation Set of 3 different Rules (different Radians & different Length)

	RULE1 Generation Set				
Child Stem> ID:0	Radians:0.44	Length:5.00	X: 470.00	Y: 800.00	
Child Stem> ID:1	Radians:0.44	Length:4.00	X: 470.00	Y: 700.00	
Child Stem> ID:2	Radians:0.44	Length:3.00	X: 503.81	Y: 627.50	
Child Stem> ID:3	Radians:0.44	Length:2.00	X: 549.77	Y: 588.93	
Child Stem> ID:4	Radians:0.44	Length:1.00	X: 588.41	Y: 578.58	
Child Stem> ID:5	Radians:0.44	Length:1.00	X: 588.41	Y: 578.58	
Child Stem> ID:6	Radians:0.44	Length:2.00	X: 549.77	Y: 588.93	
Child Stem> ID:7	Radians:0.44	Length:1.00	X: 566.68	Y: 552.68	
Child Stem> ID:8	Radians:0.44	Length:1.00	X: 566.68	Y: 552.68	
Child Stem> ID:9	Radians:0.44	Length:3.00	X: 503.81	Y: 627.50	
Child Stem> ID:10	Radians:0.44	Length:2.00	X: 503.81	Y: 567.50	
Child Stem> ID:11	Radians:0.44	Length:1.00	X: 520.71	Y: 531.24	
Child Stem> ID:12	Radians:0.44	Length:1.00	X: 520.71	Y: 531.24	
Child Stem> ID:13	Radians:0.44	Length:2.00	X: 503.81	Y: 567.50	
Child Stem> ID:14	Radians:0.44	Length:1.00	X: 486.90	Y: 531.24	
Child Stem> ID:15	Radians:0.44	Length:1.00	X: 486.90	Y: 531.24	
Child Stem> ID:16	Radians:0.44	Length:4.00	X: 470.00	Y: 700.00	
Child Stem> ID:17	Radians:0.44	Length:3.00	X: 436.19	Y: 627.50	
Child Stem> ID:18	Radians:0.44	Length:2.00	X: 436.19	Y: 567.50	
Child Stem> ID:19	Radians:0.44	Length:1.00	X: 453.10	Y: 531.24	
Child Stem> ID:20	Radians:0.44	Length:1.00	X: 453.10	Y: 531.24	
Child Stem> ID:21	Radians:0.44	Length:2.00	X: 436.19	Y: 567.50	
Child Stem> ID:22	Radians:0.44	Length:1.00	X: 419.29	Y: 531.24	
Child Stem> ID:23	Radians:0.44	Length:1.00	X: 419.29	Y: 531.24	
Child Stem> ID:24	Radians:0.44	Length:3.00	X: 436.19	Y: 627.50	
Child Stem> ID:25	Radians:0.44	Length:2.00	X: 390.23	Y: 588.93	
Child Stem> ID:26	Radians:0.44	Length:1.00	X: 373.32	Y: 552.68	
Child Stem> ID:27	Radians:0.44	Length:1.00	X: 373.32	Y: 552.68	
Child Stem> ID:28	Radians:0.44	Length:2.00	X: 390.23	Y: 588.93	
Child Stem> ID:29	Radians:0.44	Length:1.00	X: 351.59	Y: 578.58	
Child Stem> ID:30	Radians:0.44	Length:1.00	X: 351.59	Y: 578.58	
	RULE2	2 Generation Set	 i		
Child Stem> ID:31	Radians:0.52	Length:6.00	X: 470.00	Y: 800.00	
Child Stem> ID:32	Radians:0.52	Length:5.00	X: 470.00	Y: 680.00	
Child Stem> ID:33	Radians:0.52	Length:4.00	X: 520.00	Y: 593.40	
Child Stem> ID:34	Radians:0.52	Length:3.00	X: 589.28	Y: 553.40	
Child Stem> ID:35	Radians:0.52	Length:2.00	X: 649.28	Y: 553.40	

Child Stem> ID:36	Radians:0.52	Length:1.00	X: 683.92	Y: 573.40
Child Stem> ID:37	Radians:0.52	Length:1.00	X: 683.92	Y: 573.40
Child Stem> ID:38	Radians:0.52	Length:2.00	X: 649.28	Y: 553.40
Child Stem> ID:39	Radians:0.52	Length:1.00	X: 683.92	Y: 533.40
Child Stem> ID:40	Radians:0.52	Length:1.00	X: 683.92	Y: 533.40
Child Stem> ID:41	Radians:0.52	Length:3.00	X: 589.28	Y: 553.40
Child Stem> ID:42	Radians:0.52	Length:2.00	X: 619.28	Y: 501.44
Child Stem> ID:43	Radians:0.52	Length:1.00	X: 653.92	Y: 481.44
Child Stem> ID:44	Radians:0.52	Length:1.00	X: 653.92	Y: 481.44
Child Stem> ID:45	Radians:0.52	Length:2.00	X: 619.28	Y: 501.44
Child Stem> ID:46	Radians:0.52	Length:1.00	X: 619.28	Y: 461.44
Child Stem> ID:47	Radians:0.52	Length:1.00	X: 619.28	Y: 461.44
Child Stem> ID:48	Radians:0.52	Length:4.00	X: 520.00	Y: 593.40
Child Stem> ID:49	Radians:0.52	Length:3.00	X: 520.00	Y: 513.40
Child Stem> ID:50	Radians:0.52	Length:2.00	X: 550.00	Y: 461.44
Child Stem> ID:51	Radians:0.52	Length:1.00	X: 584.64	Y: 441.44
Child Stem> ID:52	Radians:0.52	Length:1.00	X: 584.64	Y: 441.44
Child Stem> ID:53	Radians:0.52	Length:2.00	X: 550.00	Y: 461.44
Child Stem> ID:54	Radians:0.52	Length:1.00	X: 550.00	Y: 421.44
Child Stem> ID:55	Radians:0.52	Length:1.00	X: 550.00	Y: 421.44
Child Stem> ID:56	Radians:0.52	Length:3.00	X: 520.00	Y: 513.40
Child Stem> ID:57	Radians:0.52	Length:2.00	X: 490.00	Y: 461.44
Child Stem> ID:58	Radians:0.52	Length:1.00	X: 490.00	Y: 421.44
Child Stem> ID:59	Radians:0.52	Length:1.00	X: 490.00	Y: 421.44
Child Stem> ID:60	Radians:0.52	Length:2.00	X: 490.00	Y: 461.44
Child Stem> ID:61	Radians:0.52	Length:1.00	X: 455.36	Y: 441.44
Child Stem> ID:62	Radians:0.52	Length:1.00	X: 455.36	Y: 441.44
Child Stem> ID:63	Radians:0.52	Length:5.00	X: 470.00	Y: 680.00
Child Stem> ID:64	Radians:0.52	Length:4.00	X: 420.00	Y: 593.40
Child Stem> ID:65	Radians:0.52	Length:3.00	X: 420.00	Y: 513.40
Child Stem> ID:66	Radians:0.52	Length:2.00	X: 450.00	Y: 461.44
Child Stem> ID:67	Radians:0.52	Length:1.00	X: 484.64	Y: 441.44
Child Stem> ID:68	Radians:0.52	Length:1.00	X: 484.64	Y: 441.44
Child Stem> ID:69	Radians:0.52	Length:2.00	X: 450.00	Y: 461.44
Child Stem> ID:70	Radians:0.52	Length:1.00	X: 450.00	Y: 421.44
Child Stem> ID:71	Radians:0.52	Length:1.00	X: 450.00	Y: 421.44
Child Stem> ID:72	Radians:0.52	Length:3.00	X: 420.00	Y: 513.40
Child Stem> ID:73	Radians:0.52	Length:2.00	X: 390.00	Y: 461.44
Child Stem> ID:74	Radians:0.52	Length:1.00	X: 390.00	Y: 421.44
Child Stem> ID:75	Radians:0.52	Length:1.00	X: 390.00	Y: 421.44
Child Stem> ID:76	Radians:0.52	Length:2.00	X: 390.00	Y: 461.44
Child Stem> ID:77	Radians:0.52	Length:1.00	X: 355.36	Y: 441.44
Child Stem> ID:78	Radians:0.52	Length:1.00	X: 355.36	Y: 441.44
Child Stem> ID:79	Radians:0.52	Length:4.00	X: 420.00	Y: 593.40

Child Stem> ID:80	Radians:0.52	Length:3.00	X: 350.72	Y: 553.40
Child Stem> ID:81	Radians:0.52	Length:2.00	X: 320.72	Y: 501.44
Child Stem> ID:82	Radians:0.52	Length:1.00	X: 320.72	Y: 461.44
Child Stem> ID:83	Radians:0.52	Length:1.00	X: 320.72	Y: 461.44
Child Stem> ID:84	Radians:0.52	Length:2.00	X: 320.72	Y: 501.44
Child Stem> ID:85	Radians:0.52	Length:1.00	X: 286.08	Y: 481.44
Child Stem> ID:86	Radians:0.52	Length:1.00	X: 286.08	Y: 481.44
Child Stem> ID:87	Radians:0.52	Length:3.00	X: 350.72	Y: 553.40
Child Stem> ID:88	Radians:0.52	Length:2.00	X: 290.72	Y: 553.40
Child Stem> ID:89	Radians:0.52	Length:1.00	X: 256.08	Y: 533.40
Child Stem> ID:90	Radians:0.52	Length:1.00	X: 256.08	Y: 533.40
Child Stem> ID:91	Radians:0.52	Length:2.00	X: 290.72	Y: 553.40
Child Stem> ID:92	Radians:0.52	Length:1.00	X: 256.08	Y: 573.40
Child Stem> ID:93	Radians:0.52	Length:1.00	X: 256.08	Y: 573.40

RULE3 Generation Set

Child Stem> ID:94	Radians:0.35	Length:7.00	X: 470.00	Y: 800.00
Child Stem> ID:95	Radians:0.35	Length:6.00	X: 470.00	Y: 660.00
Child Stem> ID:96	Radians:0.35	Length:5.00	X: 511.04	Y: 547.24
Child Stem> ID:97	Radians:0.35	Length:4.00	X: 575.32	Y: 470.63
Child Stem> ID:98	Radians:0.35	Length:3.00	X: 644.60	Y: 430.63
Child Stem> ID:99	Radians:0.35	Length:2.00	X: 703.69	Y: 420.21
Child Stem> ID:100	Radians:0.35	Length:1.00	X: 743.08	Y: 427.16
Child Stem> ID:101	Radians:0.35	Length:1.00	X: 743.08	Y: 427.16
Child Stem> ID:102	Radians:0.35	Length:2.00	X: 703.69	Y: 420.21
Child Stem> ID:103	Radians:0.35	Length:1.00	X: 738.33	Y: 400.21
Child Stem> ID:104	Radians:0.35	Length:1.00	X: 738.33	Y: 400.21
Child Stem> ID:105	Radians:0.35	Length:3.00	X: 644.60	Y: 430.63
Child Stem> ID:106	Radians:0.35	Length:2.00	X: 683.17	Y: 384.67
Child Stem> ID:107	Radians:0.35	Length:1.00	X: 717.81	Y: 364.67
Child Stem> ID:108	Radians:0.35	Length:1.00	X: 717.81	Y: 364.67
Child Stem> ID:109	Radians:0.35	Length:2.00	X: 683.17	Y: 384.67
Child Stem> ID:110	Radians:0.35	Length:1.00	X: 696.85	Y: 347.08
Child Stem> ID:111	Radians:0.35	Length:1.00	X: 696.85	Y: 347.08
Child Stem> ID:112	Radians:0.35	Length:4.00	X: 575.32	Y: 470.63
Child Stem> ID:113	Radians:0.35	Length:3.00	X: 602.68	Y: 395.46
Child Stem> ID:114	Radians:0.35	Length:2.00	X: 641.25	Y: 349.49
Child Stem> ID:115	Radians:0.35	Length:1.00	X: 675.89	Y: 329.49
Child Stem> ID:116	Radians:0.35	Length:1.00	X: 675.89	Y: 329.49
Child Stem> ID:117	Radians:0.35	Length:2.00	X: 641.25	Y: 349.49
Child Stem> ID:118	Radians:0.35	Length:1.00	X: 654.93	Y: 311.91
Child Stem> ID:119	Radians:0.35	Length:1.00	X: 654.93	Y: 311.91
Child Stem> ID:120	Radians:0.35	Length:3.00	X: 602.68	Y: 395.46

Child Stem> ID:121	Radians:0.35	Length:2.00	X: 602.68	Y: 335.46
Child Stem> ID:122	Radians:0.35	Length: 1.00	X: 616.36	Y: 297.87
Child Stem> ID:123	Radians:0.35	Length:1.00	X: 616.36	Y: 297.87
Child Stem> ID:124	Radians:0.35	Length:2.00	X: 602.68	Y: 335.46
Child Stem> ID:125	Radians:0.35	Length:1.00	X: 589.00	Y: 297.87
Child Stem> ID:126	Radians:0.35	Length:1.00	X: 589.00	Y: 297.87
Child Stem> ID:127	Radians:0.35	Length:5.00	X: 511.04	Y: 547.24
Child Stem> ID:128	Radians:0.35	Length:4.00	X: 511.04	Y: 447.24
Child Stem> ID:129	Radians:0.35	Length:3.00	X: 538.40	Y: 372.06
Child Stem> ID:130	Radians:0.35	Length:2.00	X: 576.97	Y: 326.10
Child Stem> ID:131	Radians:0.35	Length: 1.00	X: 611.61	Y: 306.10
Child Stem> ID:132	Radians:0.35	Length:1.00	X: 611.61	Y: 306.10
Child Stem> ID:133	Radians:0.35	Length:2.00	X: 576.97	Y: 326.10
Child Stem> ID:134	Radians:0.35	Length:1.00	X: 590.65	Y: 288.51
Child Stem> ID:135	Radians:0.35	Length:1.00	X: 590.65	Y: 288.51
Child Stem> ID:136	Radians:0.35	Length:3.00	X: 538.40	Y: 372.06
Child Stem> ID:137	Radians:0.35	Length:2.00	X: 538.40	Y: 312.06
Child Stem> ID:138	Radians:0.35	Length:1.00	X: 552.08	Y: 274.47
Child Stem> ID:139	Radians:0.35	Length:1.00	X: 552.08	Y: 274.47
Child Stem> ID:140	Radians:0.35	Length:2.00	X: 538.40	Y: 312.06
Child Stem> ID:141	Radians:0.35	Length:1.00	X: 524.72	Y: 274.47
Child Stem> ID:142	Radians:0.35	Length:1.00	X: 524.72	Y: 274.47
Child Stem> ID:143	Radians:0.35	Length:4.00	X: 511.04	Y: 447.24
Child Stem> ID:144	Radians:0.35	Length:3.00	X: 483.68	Y: 372.06
Child Stem> ID:145	Radians:0.35	Length:2.00	X: 483.68	Y: 312.06
Child Stem> ID:146	Radians:0.35	Length:1.00	X: 497.36	Y: 274.47
Child Stem> ID:147	Radians:0.35	Length:1.00	X: 497.36	Y: 274.47
Child Stem> ID:148	Radians:0.35	Length:2.00	X: 483.68	Y: 312.06
Child Stem> ID:149	Radians:0.35	Length:1.00	X: 470.00	Y: 274.47
Child Stem> ID:150	Radians:0.35	Length:1.00	X: 470.00	Y: 274.47
Child Stem> ID:151	Radians:0.35	Length:3.00	X: 483.68	Y: 372.06
Child Stem> ID:152	Radians:0.35	Length:2.00	X: 445.11	Y: 326.10
Child Stem> ID:153	Radians:0.35	Length:1.00	X: 431.43	Y: 288.51
Child Stem> ID:154	Radians:0.35	Length:1.00	X: 431.43	Y: 288.51
Child Stem> ID:155	Radians:0.35	Length:2.00	X: 445.11	Y: 326.10
Child Stem> ID:156	Radians:0.35	Length:1.00	X: 410.47	Y: 306.10
Child Stem> ID:157	Radians:0.35	Length:1.00	X: 410.47	Y: 306.10
Child Stem> ID:158	Radians:0.35	Length:6.00	X: 470.00	Y: 660.00
Child Stem> ID:159	Radians:0.35	Length:5.00	X: 428.96	Y: 547.24
Child Stem> ID:160	Radians:0.35	Length:4.00	X: 428.96	Y: 447.24
Child Stem> ID:161	Radians:0.35	Length:3.00	X: 456.32	Y: 372.06
Child Stem> ID:162	Radians:0.35	Length:2.00	X: 494.89	Y: 326.10
Child Stem> ID:163	Radians:0.35	Length: 1.00	X: 529.53	Y: 306.10
Child Stem> ID:164	Radians:0.35	Length: 1.00	X: 529.53	Y: 306.10
Ciniu Steile ID.104	radians.0.33	Lengui.1.00	1. 547.55	1. 500.10

Child Stem> ID:165	Radians:0.35	Length:2.00	X: 494.89	Y: 326.10
Child Stem> ID:166	Radians:0.35	Length:1.00	X: 508.57	Y: 288.51
Child Stem> ID:167	Radians:0.35	Length:1.00	X: 508.57	Y: 288.51
Child Stem> ID:168	Radians:0.35	Length:3.00	X: 456.32	Y: 372.06
Child Stem> ID:169	Radians:0.35	Length:2.00	X: 456.32	Y: 312.06
Child Stem> ID:170	Radians:0.35	Length:1.00	X: 470.00	Y: 274.47
Child Stem> ID:171	Radians:0.35	Length:1.00	X: 470.00	Y: 274.47
Child Stem> ID:172	Radians:0.35	Length:2.00	X: 456.32	Y: 312.06
Child Stem> ID:173	Radians:0.35	Length:1.00	X: 442.64	Y: 274.47
Child Stem> ID:174	Radians:0.35	Length:1.00	X: 442.64	Y: 274.47
Child Stem> ID:175	Radians:0.35	Length:4.00	X: 428.96	Y: 447.24
Child Stem> ID:176	Radians:0.35	Length:3.00	X: 401.60	Y: 372.06
Child Stem> ID:177	Radians:0.35	Length:2.00	X: 401.60	Y: 312.06
Child Stem> ID:178	Radians:0.35	Length:1.00	X: 415.28	Y: 274.47
Child Stem> ID:179	Radians:0.35	Length:1.00	X: 415.28	Y: 274.47
Child Stem> ID:180	Radians:0.35	Length:2.00	X: 401.60	Y: 312.06
Child Stem> ID:181	Radians:0.35	Length:1.00	X: 387.92	Y: 274.47
Child Stem> ID:182	Radians:0.35	Length:1.00	X: 387.92	Y: 274.47
Child Stem> ID:183	Radians:0.35	Length:3.00	X: 401.60	Y: 372.06
Child Stem> ID:184	Radians:0.35	Length:2.00	X: 363.03	Y: 326.10
Child Stem> ID:185	Radians:0.35	Length:1.00	X: 349.35	Y: 288.51
Child Stem> ID:186	Radians:0.35	Length:1.00	X: 349.35	Y: 288.51
Child Stem> ID:187	Radians:0.35	Length:2.00	X: 363.03	Y: 326.10
Child Stem> ID:188	Radians:0.35	Length:1.00	X: 328.39	Y: 306.10
Child Stem> ID:189	Radians:0.35	Length:1.00	X: 328.39	Y: 306.10
Child Stem> ID:190	Radians:0.35	Length:5.00	X: 428.96	Y: 547.24
Child Stem> ID:191	Radians:0.35	Length:4.00	X: 364.68	Y: 470.63
Child Stem> ID:192	Radians:0.35	Length:3.00	X: 337.32	Y: 395.46
Child Stem> ID:193	Radians:0.35	Length:2.00	X: 337.32	Y: 335.46
Child Stem> ID:194	Radians:0.35	Length:1.00	X: 351.00	Y: 297.87
Child Stem> ID:195	Radians:0.35	Length:1.00	X: 351.00	Y: 297.87
Child Stem> ID:196	Radians:0.35	Length:2.00	X: 337.32	Y: 335.46
Child Stem> ID:197	Radians:0.35	Length:1.00	X: 323.64	Y: 297.87
Child Stem> ID:198	Radians:0.35	Length:1.00	X: 323.64	Y: 297.87
Child Stem> ID:199	Radians:0.35	Length:3.00	X: 337.32	Y: 395.46
Child Stem> ID:200	Radians:0.35	Length:2.00	X: 298.75	Y: 349.49
Child Stem> ID:201	Radians:0.35	Length:1.00	X: 285.07	Y: 311.91
Child Stem> ID:202	Radians:0.35	Length:1.00	X: 285.07	Y: 311.91
Child Stem> ID:203	Radians:0.35	Length:2.00	X: 298.75	Y: 349.49
Child Stem> ID:204	Radians:0.35	Length:1.00	X: 264.11	Y: 329.49
Child Stem> ID:205	Radians:0.35	Length:1.00	X: 264.11	Y: 329.49
Child Stem> ID:206	Radians:0.35	Length:4.00	X: 364.68	Y: 470.63
Child Stem> ID:207	Radians:0.35	Length:3.00	X: 295.40	Y: 430.63
Child Stem> ID:208	Radians:0.35	Length:2.00	X: 256.83	Y: 384.67

Child Stem> ID:209	Radians:0.35	Length:1.00	X: 243.15	Y: 347.08
Child Stem> ID:210	Radians:0.35	Length:1.00	X: 243.15	Y: 347.08
Child Stem> ID:211	Radians:0.35	Length:2.00	X: 256.83	Y: 384.67
Child Stem> ID:212	Radians:0.35	Length:1.00	X: 222.19	Y: 364.67
Child Stem> ID:213	Radians:0.35	Length:1.00	X: 222.19	Y: 364.67
Child Stem> ID:214	Radians:0.35	Length:3.00	X: 295.40	Y: 430.63
Child Stem> ID:215	Radians:0.35	Length:2.00	X: 236.31	Y: 420.21
Child Stem> ID:216	Radians:0.35	Length:1.00	X: 201.67	Y: 400.21
Child Stem> ID:217	Radians:0.35	Length:1.00	X: 201.67	Y: 400.21
Child Stem> ID:218	Radians:0.35	Length:2.00	X: 236.31	Y: 420.21
Child Stem> ID:219	Radians:0.35	Length:1.00	X: 196.92	Y: 427.16
Child Stem> ID:220	Radians:0.35	Length:1.00	X: 196.92	Y: 427.16