

EDS_GROUP_PROJECT

GROUP MEMBERS:

401 – ALVIN ABRAHAM

404 – ARHANT NITNAWARE

407 – ANKIT NITNAWARE

414 – ANKIT KUMAR

DIV – D

BATCH – D1

DATASET – LOAN DATASET

LOAN DATASET CSV

Loan_ID	Gender	Married	Dependents	Education	Self_Employed	ApplicantIncome	CoapplicantIncome	LoanAmount	Loan_Amount_Term	Credit_History	Property_Area	
LP001015	Male	Yes	0	Graduate	No	5720	0	110	360	1	Urban	
LP001022	Male	Yes	1	Graduate	No	3076	1500	126	360	1	Urban	
LP001031	Male	Yes	2	Graduate	No	5000	1800	208	360	1	Urban	
LP001035	Male	Yes	2	Graduate	No	2340	2546	100	360		Urban	
LP001051	Male	No	0	Not Graduate	No	3276	0	78	360	1	Urban	
LP001054	Male	Yes	0	Not Graduate	Yes	2165	3422	152	360	1	Urban	
LP001055	Female	No	1	Not Graduate	No	2226	0	59	360	1	Semiurban	

LP0 010 56	Ma le	Yes	2	Not Grad uate	No	3881	0	147	360	0	Rural	
LP0 010 59	Ma le	Yes	2	Grad uate		13633	0	280	240	1	Urban	
LP0 010 67	Ma le	No	0	Not Grad uate	No	2400	2400	123	360	1	Semiurba n	
LP0 010 78	Ma le	No	0	Not Grad uate	No	3091	0	90	360	1	Urban	
LP0 010 82	Ma le	Yes	1	Grad uate		2185	1516	162	360	1	Semiurba n	
LP0 010 83	Ma le	No	3+	Grad uate	No	4166	0	40	180		Urban	
LP0 010 94	Ma le	Yes	2	Grad uate		12173	0	166	360	0	Semiurba n	
LP0 010 96	Fe ma le	No	0	Grad uate	No	4666	0	124	360	1	Semiurba n	
LP0 010 99	Ma le	No	1	Grad uate	No	5667	0	131	360	1	Urban	
LP0 011 05	Ma le	Yes	2	Grad uate	No	4583	2916	200	360	1	Urban	
LP0 011 07	Ma le	Yes	3+	Grad uate	No	3786	333	126	360	1	Semiurba n	
LP0 011 08	Ma le	Yes	0	Grad uate	No	9226	7916	300	360	1	Urban	
LP0 011 15	Ma le	No	0	Grad uate	No	1300	3470	100	180	1	Semiurba n	
LP0 011 21	Ma le	Yes	1	Not Grad uate	No	1888	1620	48	360	1	Urban	
LP0 011 24	Fe ma le	No	3+	Not Grad uate	No	2083	0	28	180	1	Urban	
LP0 011 28		No	0	Grad uate	No	3909	0	101	360	1	Urban	
LP0 011 35	Fe ma le	No	0	Not Grad uate	No	3765	0	125	360	1	Urban	

LP0 011 49	Ma le	Yes	0	Grad uate	No	5400	4380	290	360	1	Urban	
LP0 011 53	Ma le	No	0	Grad uate	No	0	24000	148	360	0	Rural	
LP0 011 63	Ma le	Yes	2	Grad uate	No	4363	1250	140	360		Urban	
LP0 011 69	Ma le	Yes	0	Grad uate	No	7500	3750	275	360	1	Urban	
LP0 011 74	Ma le	Yes	0	Grad uate	No	3772	833	57	360		Semiurba n	
LP0 011 76	Ma le	No	0	Grad uate	No	2942	2382	125	180	1	Urban	
LP0 011 77	Fe ma le	No	0	Not Grad uate	No	2478	0	75	360	1	Semiurba n	
LP0 011 83	Ma le	Yes	2	Grad uate	No	6250	820	192	360	1	Urban	
LP0 011 85	Ma le	No	0	Grad uate	No	3268	1683	152	360	1	Semiurba n	
LP0 011 87	Ma le	Yes	0	Grad uate	No	2783	2708	158	360	1	Urban	
LP0 011 90	Ma le	Yes	0	Grad uate	No	2740	1541	101	360	1	Urban	
LP0 012 03	Ma le	No	0	Grad uate	No	3150	0	176	360	0	Semiurba n	
LP0 012 08	Ma le	Yes	2	Grad uate		7350	4029	185	180	1	Urban	
LP0 012 10	Ma le	Yes	0	Grad uate	Yes	2267	2792	90	360	1	Urban	
LP0 012 11	Ma le	No	0	Grad uate	Yes	5833	0	116	360	1	Urban	
LP0 012 19	Ma le	No	0	Grad uate	No	3643	1963	138	360	1	Urban	
LP0 012 20	Ma le	Yes	0	Grad uate	No	5629	818	100	360	1	Urban	

LP0 012 21	Fe ma le	No	0	Grad uate	No	3644	0	110	360	1	Urban	
LP0 012 26	Ma le	Yes	0	Not Grad uate	No	1750	2024	90	360	1	Semiurba n	
LP0 012 30	Ma le	No	0	Grad uate	No	6500	2600	200	360	1	Semiurba n	
LP0 012 31	Fe ma le	No	0	Grad uate	No	3666	0	84	360	1	Urban	
LP0 012 32	Ma le	Yes	0	Grad uate	No	4260	3900	185			Urban	
LP0 012 37	Ma le	Yes		Not Grad uate	No	4163	1475	162	360	1	Urban	
LP0 012 42	Ma le	No	0	Not Grad uate	No	2356	1902	108	360	1	Semiurba n	
LP0 012 68	Ma le	No	0	Grad uate	No	6792	3338	187		1	Urban	
LP0 012 70	Ma le	Yes	3+	Not Grad uate	Yes	8000	250	187	360	1	Semiurba n	
LP0 012 84	Ma le	Yes	1	Grad uate	No	2419	1707	124	360	1	Urban	
LP0 012 87		Yes	3+	Not Grad uate	No	3500	833	120	360	1	Semiurba n	
LP0 012 91	Ma le	Yes	1	Grad uate	No	3500	3077	160	360	1	Semiurba n	
LP0 012 98	Ma le	Yes	2	Grad uate	No	4116	1000	30	180	1	Urban	
LP0 013 12	Ma le	Yes	0	Not Grad uate	Yes	5293	0	92	360	1	Urban	
LP0 013 13	Ma le	No	0	Grad uate	No	2750	0	130	360	0	Urban	
LP0 013 17	Fe ma le	No	0	Not Grad uate	No	4402	0	130	360	1	Rural	
LP0 013 21	Ma le	Yes	2	Grad uate	No	3613	3539	134	180	1	Semiurba n	

LP0 013 23	Fe ma le	Yes	2	Grad uate	No	2779	3664	176	360	0	Semiurba n	
LP0 013 24	Ma le	Yes	3+	Grad uate	No	4720	0	90	180	1	Semiurba n	
LP0 013 32	Ma le	Yes	0	Not Grad uate	No	2415	1721	110	360	1	Semiurba n	
LP0 013 35	Ma le	Yes	0	Grad uate	Yes	7016	292	125	360	1	Urban	
LP0 013 38	Fe ma le	No	2	Grad uate	No	4968	0	189	360	1	Semiurba n	
LP0 013 47	Fe ma le	No	0	Grad uate	No	2101	1500	108	360	0	Rural	
LP0 013 48	Ma le	Yes	3+	Not Grad uate	No	4490	0	125	360	1	Urban	
LP0 013 51	Ma le	Yes	0	Grad uate	No	2917	3583	138	360	1	Semiurba n	
LP0 013 52	Ma le	Yes	0	Not Grad uate	No	4700	0	135	360	0	Semiurba n	
LP0 013 58	Ma le	Yes	0	Grad uate	No	3445	0	130	360	0	Semiurba n	
LP0 013 59	Ma le	Yes	0	Grad uate	No	7666	0	187	360	1	Semiurba n	
LP0 013 61	Ma le	Yes	0	Grad uate	No	2458	5105	188	360	0	Rural	
LP0 013 66	Fe ma le	No		Grad uate	No	3250	0	95	360	1	Semiurba n	
LP0 013 68	Ma le	No	0	Grad uate	No	4463	0	65	360	1	Semiurba n	
LP0 013 75	Ma le	Yes	1	Grad uate		4083	1775	139	60	1	Urban	
LP0 013 80	Ma le	Yes	0	Grad uate	Yes	3900	2094	232	360	1	Rural	
LP0 013 86	Ma le	Yes	0	Not Grad uate	No	4750	3583	144	360	1	Semiurba n	

LP0 014 00	Ma le	No	0	Grad uate	No	3583	3435	155	360	1	Urban	
LP0 014 07	Ma le	Yes	0	Grad uate	No	3189	2367	186	360	1	Urban	
LP0 014 13	Ma le	No	0	Grad uate	Yes	6356	0	50	360	1	Rural	
LP0 014 15	Ma le	Yes	1	Grad uate	No	3413	4053		360	1	Semiurba n	
LP0 014 19	Fe ma le	Yes	0	Grad uate	No	7950	0	185	360	1	Urban	
LP0 014 20	Ma le	Yes	3+	Grad uate	No	3829	1103	163	360	0	Urban	
LP0 014 28	Ma le	Yes	3+	Grad uate	No	72529	0	360	360	1	Urban	
LP0 014 45	Ma le	Yes	2	Not Grad uate	No	4136	0	149	480	0	Rural	
LP0 014 46	Ma le	Yes	0	Grad uate	No	8449	0	257	360	1	Rural	
LP0 014 50	Ma le	Yes	0	Grad uate	No	4456	0	131	180	0	Semiurba n	
LP0 014 52	Ma le	Yes	2	Grad uate	No	4635	8000	102	180	1	Rural	
LP0 014 55	Ma le	Yes	0	Grad uate	No	3571	1917	135	360	1	Urban	
LP0 014 66	Ma le	No	0	Grad uate	No	3066	0	95	360	1	Semiurba n	
LP0 014 71	Ma le	No	2	Not Grad uate	No	3235	2015	77	360	1	Semiurba n	
LP0 014 72	Fe ma le	No	0	Grad uate		5058	0	200	360	1	Rural	
LP0 014 75	Ma le	Yes	0	Grad uate	Yes	3188	2286	130	360		Rural	
LP0 014 83	Ma le	Yes	3+	Grad uate	No	13518	0	390	360	1	Rural	

LP0 014 86	Ma le	Yes	1	Grad uate	No	4364	2500	185	360	1	Semiurba n	
LP0 014 90	Ma le	Yes	2	Not Grad uate	No	4766	1646	100	360	1	Semiurba n	
LP0 014 96	Ma le	Yes	1	Grad uate	No	4609	2333	123	360	0	Semiurba n	
LP0 014 99	Fe ma le	Yes	3+	Grad uate	No	6260	0	110	360	1	Semiurba n	
LP0 015 00	Ma le	Yes	1	Grad uate	No	3333	4200	256	360	1	Urban	
LP0 015 01	Ma le	Yes	0	Grad uate	No	3500	3250	140	360	1	Semiurba n	
LP0 015 17	Ma le	Yes	3+	Grad uate	No	9719	0	61	360	1	Urban	
LP0 015 27	Ma le	Yes	3+	Grad uate	No	6835	0	188	360		Semiurba n	
LP0 015 34	Ma le	No	0	Grad uate	No	4452	0	131	360	1	Rural	
LP0 015 42	Fe ma le	Yes	0	Grad uate	No	2262	0		480	0	Semiurba n	
LP0 015 47	Ma le	Yes	1	Grad uate	No	3901	0	116	360	1	Urban	
LP0 015 48	Ma le	Yes	2	Not Grad uate	No	2687	0	50	180	1	Rural	
LP0 015 58	Ma le	No	0	Grad uate	No	2243	2233	107	360		Semiurba n	
LP0 015 61	Fe ma le	Yes	0	Grad uate	No	3417	1287	200	360	1	Semiurba n	
LP0 015 63		No	0	Grad uate	No	1596	1760	119	360	0	Urban	
LP0 015 67	Ma le	Yes	3+	Grad uate	No	4513	0	120	360	1	Rural	
LP0 015 68	Ma le	Yes	0	Grad uate	No	4500	0	140	360	1	Semiurba n	

LP0 015 73	Ma le	Yes	0	Not Grad uate	No	4523	1350	165	360	1	Urban	
LP0 015 84	Fe ma le	No	0	Grad uate	Yes	4742	0	108	360	1	Semiurba n	
LP0 015 87	Ma le	Yes		Grad uate	No	4082	0	93	360	1	Semiurba n	
LP0 015 89	Fe ma le	No	0	Grad uate	No	3417	0	102	360	1	Urban	
LP0 015 91	Fe ma le	Yes	2	Grad uate	No	2922	3396	122	360	1	Semiurba n	
LP0 015 99	Ma le	Yes	0	Grad uate	No	4167	4754	160	360	1	Rural	
LP0 016 01	Ma le	No	3+	Grad uate	No	4243	4123	157	360		Semiurba n	
LP0 016 07	Fe ma le	No	0	Not Grad uate	No	0	1760	180	360	1	Semiurba n	
LP0 016 11	Ma le	Yes	1	Grad uate	No	1516	2900	80		0	Rural	
LP0 016 13	Fe ma le	No	0	Grad uate	No	1762	2666	104	360	0	Urban	
LP0 016 22	Ma le	Yes	2	Grad uate	No	724	3510	213	360	0	Rural	
LP0 016 27	Ma le	No	0	Grad uate	No	3125	0	65	360	1	Urban	
LP0 016 50	Ma le	Yes	0	Grad uate	No	2333	3803	146	360	1	Rural	
LP0 016 51	Ma le	Yes	3+	Grad uate	No	3350	1560	135	360	1	Urban	
LP0 016 52	Ma le	No	0	Grad uate	No	2500	6414	187	360	0	Rural	
LP0 016 55	Fe ma le	No	0	Grad uate	No	12500	0	300	360	0	Urban	
LP0 016 60	Ma le	No	0	Grad uate	No	4667	0	120	360	1	Semiurba n	

LP0 016 62	Ma le	No	0	Grad uate	No	6500	0	71	360	0	Urban	
LP0 016 63	Ma le	Yes	2	Grad uate	No	7500	0	225	360	1	Urban	
LP0 016 67	Ma le	No	0	Grad uate	No	3073	0	70	180	1	Urban	
LP0 016 95	Ma le	Yes	1	Not Grad uate	No	3321	2088	70		1	Semiurba n	
LP0 017 03	Ma le	Yes	0	Grad uate	No	3333	1270	124	360	1	Urban	
LP0 017 18	Ma le	No	0	Grad uate	No	3391	0	132	360	1	Rural	
LP0 017 28	Ma le	Yes	1	Grad uate	Yes	3343	1517	105	360	1	Rural	
LP0 017 35	Fe ma le	No	1	Grad uate	No	3620	0	90	360	1	Urban	
LP0 017 37	Ma le	No	0	Grad uate	No	4000	0	83	84	1	Urban	
LP0 017 39	Ma le	Yes	0	Grad uate	No	4258	0	125	360	1	Urban	
LP0 017 42	Ma le	Yes	2	Grad uate	No	4500	0	147	360	1	Rural	
LP0 017 57	Ma le	Yes	1	Grad uate	No	2014	2925	120	360	1	Rural	
LP0 017 69		No		Grad uate	No	3333	1250	110	360	1	Semiurba n	
LP0 017 71	Fe ma le	No	3+	Grad uate	No	4083	0	103	360		Semiurba n	
LP0 017 85	Ma le	No	0	Grad uate	No	4727	0	150	360	0	Rural	
LP0 017 87	Ma le	Yes	3+	Grad uate	No	3089	2999	100	240	1	Rural	
LP0 017 89	Ma le	Yes	3+	Not Graduate		6794	528	139	360	0	Urban	

LP0 017 91	Ma le	Yes	0	Grad uate	Yes	32000	0	550	360		Semiurba n	
LP0 017 94	Ma le	Yes	2	Grad uate	Yes	10890	0	260	12	1	Rural	
LP0 017 97	Fe ma le	No	0	Grad uate	No	12941	0	150	300	1	Urban	
LP0 018 15	Ma le	No	0	Not Grad uate	No	3276	0	90	360	1	Semiurba n	
LP0 018 17	Ma le	No	0	Not Grad uate	Yes	8703	0	199	360	0	Rural	
LP0 018 18	Ma le	Yes	1	Grad uate	No	4742	717	139	360	1	Semiurba n	
LP0 018 22	Ma le	No	0	Grad uate	No	5900	0	150	360	1	Urban	
LP0 018 27	Ma le	No	0	Grad uate	No	3071	4309	180	360	1	Urban	
LP0 018 31	Ma le	Yes	0	Grad uate	No	2783	1456	113	360	1	Urban	
LP0 018 42	Ma le	No	0	Grad uate	No	5000	0	148	360	1	Rural	
LP0 018 53	Ma le	Yes	1	Not Grad uate	No	2463	2360	117	360	0	Urban	
LP0 018 55	Ma le	Yes	2	Grad uate	No	4855	0	72	360	1	Rural	
LP0 018 57	Ma le	No	0	Not Grad uate	Yes	1599	2474	125	300	1	Semiurba n	
LP0 018 62	Ma le	Yes	2	Grad uate	Yes	4246	4246	214	360	1	Urban	
LP0 018 67	Ma le	Yes	0	Grad uate	No	4333	2291	133	350	1	Rural	
LP0 018 78	Ma le	No	1	Grad uate	No	5823	2529	187	360	1	Semiurba n	
LP0 018 81	Ma le	Yes	0	Not Grad uate	No	7895	0	143	360	1	Rural	

LP0 018 86	Ma le	No	0	Grad uate	No	4150	4256	209	360	1	Rural	
LP0 019 06	Ma le	No	0	Grad uate		2964	0	84	360	0	Semiurba n	
LP0 019 09	Ma le	No	0	Grad uate	No	5583	0	116	360	1	Urban	
LP0 019 11	Fe ma le	No	0	Grad uate	No	2708	0	65	360	1	Rural	
LP0 019 21	Ma le	No	1	Grad uate	No	3180	2370	80	240		Rural	
LP0 019 23	Ma le	No	0	Not Grad uate	No	2268	0	170	360	0	Semiurba n	
LP0 019 33	Ma le	No	2	Not Grad uate	No	1141	2017	120	360	0	Urban	
LP0 019 43	Ma le	Yes	0	Grad uate	No	3042	3167	135	360	1	Urban	
LP0 019 50	Fe ma le	Yes	3+	Grad uate		1750	2935	94	360	0	Semiurba n	
LP0 019 59	Fe ma le	Yes	1	Grad uate	No	3564	0	79	360	1	Rural	
LP0 019 61	Fe ma le	No	0	Grad uate	No	3958	0	110	360	1	Rural	
LP0 019 73	Ma le	Yes	2	Not Grad uate	No	4483	0	130	360	1	Rural	
LP0 019 75	Ma le	Yes	0	Grad uate	No	5225	0	143	360	1	Rural	
LP0 019 79	Ma le	No	0	Grad uate	No	3017	2845	159	180	0	Urban	
LP0 019 95	Ma le	Yes	0	Not Grad uate	No	2431	1820	110	360	0	Rural	
LP0 019 99	Ma le	Yes	2	Grad uate		4912	4614	160	360	1	Rural	
LP0 020 07	Ma le	Yes	2	Not Grad uate	No	2500	3333	131	360	1	Urban	

LP0 020 09	Fe ma le	No	0	Grad uate	No	2918	0	65	360		Rural	
LP0 020 16	Ma le	Yes	2	Grad uate	No	5128	0	143	360	1	Rural	
LP0 020 17	Ma le	Yes	3+	Grad uate	No	15312	0	187	360		Urban	
LP0 020 18	Ma le	Yes	2	Grad uate	No	3958	2632	160	360	1	Semiurba n	
LP0 020 27	Ma le	Yes	0	Grad uate	No	4334	2945	165	360	1	Semiurba n	
LP0 020 28	Ma le	Yes	2	Grad uate	No	4358	0	110	360	1	Urban	
LP0 020 42	Fe ma le	Yes	1	Grad uate	No	4000	3917	173	360	1	Rural	
LP0 020 45	Ma le	Yes	3+	Grad uate	No	10166	750	150		1	Urban	
LP0 020 46	Ma le	Yes	0	Not Grad uate	No	4483	0	135	360		Semiurba n	
LP0 020 47	Ma le	Yes	2	Not Grad uate	No	4521	1184	150	360	1	Semiurba n	
LP0 020 56	Ma le	Yes	2	Grad uate	No	9167	0	235	360	1	Semiurba n	
LP0 020 57	Ma le	Yes	0	Not Grad uate	No	13083	0		360	1	Rural	
LP0 020 59	Ma le	Yes	2	Grad uate	No	7874	3967	336	360	1	Rural	
LP0 020 62	Fe ma le	Yes	1	Grad uate	No	4333	0	132	84	1	Rural	
LP0 020 64	Ma le	No	0	Grad uate	No	4083	0	96	360	1	Urban	
LP0 020 69	Ma le	Yes	2	Not Graduate		3785	2912	180	360	0	Rural	
LP0 020 70	Ma le	Yes	3+	Not Grad uate	No	2654	1998	128	360	0	Rural	

LP0 020 77	Ma le	Yes	1	Grad uate	No	10000	2690	412	360	1	Semiurba n	
LP0 020 83	Ma le	No	0	Grad uate	Yes	5833	0	116	360	1	Urban	
LP0 020 90	Ma le	Yes	1	Grad uate	No	4796	0	114	360	0	Semiurba n	
LP0 020 96	Ma le	Yes	0	Not Grad uate	No	2000	1600	115	360	1	Rural	
LP0 020 99	Ma le	Yes	2	Grad uate	No	2540	700	104	360	0	Urban	
LP0 021 02	Ma le	Yes	0	Grad uate	Yes	1900	1442	88	360	1	Rural	
LP0 021 05	Ma le	Yes	0	Grad uate	Yes	8706	0	108	480	1	Rural	
LP0 021 07	Ma le	Yes	3+	Not Grad uate	No	2855	542	90	360	1	Urban	
LP0 021 11	Ma le	Yes		Grad uate	No	3016	1300	100	360		Urban	
LP0 021 17	Fe ma le	Yes	0	Grad uate	No	3159	2374	108	360	1	Semiurba n	
LP0 021 18	Fe ma le	No	0	Grad uate	No	1937	1152	78	360	1	Semiurba n	
LP0 021 23	Ma le	Yes	0	Grad uate	No	2613	2417	123	360	1	Semiurba n	
LP0 021 25	Ma le	Yes	1	Grad uate	No	4960	2600	187	360	1	Semiurba n	
LP0 021 48	Ma le	Yes	1	Grad uate	No	3074	1083	146	360	1	Semiurba n	
LP0 021 52	Fe ma le	No	0	Grad uate	No	4213	0	80	360	1	Urban	
LP0 021 65		No	1	Not Grad uate	No	2038	4027	100	360	1	Rural	
LP0 021 67	Fe ma le	No	0	Grad uate	No	2362	0	55	360	1	Urban	

LP0 021 68	Ma le	No	0	Grad uate	No	5333	2400	200	360	0	Rural	
LP0 021 72	Ma le	Yes	3+	Grad uate	Yes	5384	0	150	360	1	Semiurba n	
LP0 021 76	Ma le	No	0	Grad uate	No	5708	0	150	360	1	Rural	
LP0 021 83	Ma le	Yes	0	Not Grad uate	No	3754	3719	118		1	Rural	
LP0 021 84	Ma le	Yes	0	Not Grad uate	No	2914	2130	150	300	1	Urban	
LP0 021 86	Ma le	Yes	0	Not Grad uate	No	2747	2458	118	36	1	Semiurba n	
LP0 021 92	Ma le	Yes	0	Grad uate	No	7830	2183	212	360	1	Rural	
LP0 021 95	Ma le	Yes	1	Grad uate	Yes	3507	3148	212	360	1	Rural	
LP0 022 08	Ma le	Yes	1	Grad uate	No	3747	2139	125	360	1	Urban	
LP0 022 12	Ma le	Yes	0	Grad uate	No	2166	2166	108	360		Urban	
LP0 022 40	Ma le	Yes	0	Not Grad uate	No	3500	2168	149	360	1	Rural	
LP0 022 45	Ma le	Yes	2	Not Grad uate	No	2896	0	80	480	1	Urban	
LP0 022 53	Fe ma le	No	1	Grad uate	No	5062	0	152	300	1	Rural	
LP0 022 56	Fe ma le	No	2	Grad uate	Yes	5184	0	187	360	0	Semiurba n	
LP0 022 57	Fe ma le	No	0	Grad uate	No	2545	0	74	360	1	Urban	
LP0 022 64	Ma le	Yes	0	Grad uate	No	2553	1768	102	360	1	Urban	
LP0 022 70	Ma le	Yes	1	Grad uate	No	3436	3809	100	360	1	Rural	

LP0 022 79	Ma le	No	0	Grad uate	No	2412	2755	130	360	1	Rural	
LP0 022 86	Ma le	Yes	3+	Not Grad uate	No	5180	0	125	360	0	Urban	
LP0 022 94	Ma le	No	0	Grad uate	No	14911	14507	130	360	1	Semiurba n	
LP0 022 98		No	0	Grad uate	Yes	2860	2988	138	360	1	Urban	
LP0 023 06	Ma le	Yes	0	Grad uate	No	1173	1594	28	180	1	Rural	
LP0 023 10	Fe ma le	No	1	Grad uate	No	7600	0	92	360	1	Semiurba n	
LP0 023 11	Fe ma le	Yes	0	Grad uate	No	2157	1788	104	360	1	Urban	
LP0 023 16	Ma le	No	0	Grad uate	No	2231	2774	176	360	0	Urban	
LP0 023 21	Fe ma le	No	0	Grad uate	No	2274	5211	117	360	0	Semiurba n	
LP0 023 25	Ma le	Yes	2	Not Grad uate	No	6166	13983	102	360	1	Rural	
LP0 023 26	Ma le	Yes	2	Not Grad uate	No	2513	1110	107	360	1	Semiurba n	
LP0 023 29	Ma le	No	0	Grad uate	No	4333	0	66	480	1	Urban	
LP0 023 33	Ma le	No	0	Not Grad uate	No	3844	0	105	360	1	Urban	
LP0 023 39	Ma le	Yes	0	Grad uate	No	3887	1517	105	360	0	Semiurba n	
LP0 023 44	Ma le	Yes	0	Grad uate	No	3510	828	105	360	1	Semiurba n	
LP0 023 46	Ma le	Yes	0	Grad uate		2539	1704	125	360	0	Rural	
LP0 023 54	Fe ma le	No	0	Not Grad uate	No	2107	0	64	360	1	Semiurba n	

LP0 023 55		Yes	0	Grad uate	No	3186	3145	150	180	0	Semiurba n	
LP0 023 58	Ma le	Yes	2	Grad uate	Yes	5000	2166	150	360	1	Urban	
LP0 023 60	Ma le	Yes		Grad uate	No	10000	0		360	1	Urban	
LP0 023 75	Ma le	Yes	0	Not Grad uate	Yes	3943	0	64	360	1	Semiurba n	
LP0 023 76	Ma le	No	0	Grad uate	No	2925	0	40	180	1	Rural	
LP0 023 83	Ma le	Yes	3+	Grad uate	No	3242	437	142	480	0	Urban	
LP0 023 85	Ma le	Yes		Grad uate	No	3863	0	70	300	1	Semiurba n	
LP0 023 89	Fe ma le	No	1	Grad uate	No	4028	0	131	360	1	Semiurba n	
LP0 023 94	Ma le	Yes	2	Grad uate	No	4010	1025	120	360	1	Urban	
LP0 023 97	Fe ma le	Yes	1	Grad uate	No	3719	1585	114	360	1	Urban	
LP0 023 99	Ma le	No	0	Grad uate		2858	0	123	360	0	Rural	
LP0 024 00	Fe ma le	Yes	0	Grad uate	No	3833	0	92	360	1	Rural	
LP0 024 02	Ma le	Yes	0	Grad uate	No	3333	4288	160	360	1	Urban	
LP0 024 12	Ma le	Yes	0	Grad uate	No	3007	3725	151	360	1	Rural	
LP0 024 15	Fe ma le	No	1	Grad uate		1850	4583	81	360		Rural	
LP0 024 17	Ma le	Yes	3+	Not Grad uate	No	2792	2619	171	360	1	Semiurba n	
LP0 024 20	Ma le	Yes	0	Grad uate	No	2982	1550	110	360	1	Semiurba n	

LP0 024 25	Ma le	No	0	Grad uate	No	3417	738	100	360		Rural	
LP0 024 33	Ma le	Yes	1	Grad uate	No	18840	0	234	360	1	Rural	
LP0 024 40	Ma le	Yes	2	Grad uate	No	2995	1120	184	360	1	Rural	
LP0 024 41	Ma le	No		Grad uate	No	3579	3308	138	360		Semiurba n	
LP0 024 42	Fe ma le	Yes	1	Not Grad uate	No	3835	1400	112	480	0	Urban	
LP0 024 45	Fe ma le	No	1	Not Grad uate	No	3854	3575	117	360	1	Rural	
LP0 024 50	Ma le	Yes	2	Grad uate	No	5833	750	49	360	0	Rural	
LP0 024 71	Ma le	No	0	Grad uate	No	3508	0	99	360	1	Rural	
LP0 024 76	Fe ma le	Yes	3+	Not Grad uate	No	1635	2444	99	360	1	Urban	
LP0 024 82	Fe ma le	No	0	Grad uate	Yes	3333	3916	212	360	1	Rural	
LP0 024 85	Ma le	No	1	Grad uate	No	24797	0	240	360	1	Semiurba n	
LP0 024 95	Ma le	Yes	2	Grad uate	No	5667	440	130	360	0	Semiurba n	
LP0 024 96	Fe ma le	No	0	Grad uate	No	3500	0	94	360	0	Semiurba n	
LP0 025 23	Ma le	Yes	3+	Grad uate	No	2773	1497	108	360	1	Semiurba n	
LP0 025 42	Ma le	Yes	0	Grad uate		6500	0	144	360	1	Urban	
LP0 025 50	Fe ma le	No	0	Grad uate	No	5769	0	110	180	1	Semiurba n	
LP0 025 51	Ma le	Yes	3+	Not Graduate		3634	910	176	360	0	Semiurba n	

LP0 025 53		No	0	Grad uate	No	29167	0	185	360	1	Semiurba n	
LP0 025 54	Ma le	No	0	Grad uate	No	2166	2057	122	360	1	Semiurba n	
LP0 025 61	Ma le	Yes	0	Grad uate	No	5000	0	126	360	1	Rural	
LP0 025 66	Fe ma le	No	0	Grad uate	No	5530	0	135	360		Urban	
LP0 025 68	Ma le	No	0	Not Grad uate	No	9000	0	122	360	1	Rural	
LP0 025 70	Fe ma le	Yes	2	Grad uate	No	10000	11666	460	360	1	Urban	
LP0 025 72	Ma le	Yes	1	Grad uate		8750	0	297	360	1	Urban	
LP0 025 81	Ma le	Yes	0	Not Grad uate	No	2157	2730	140	360		Rural	
LP0 025 84	Ma le	No	0	Grad uate		1972	4347	106	360	1	Rural	
LP0 025 92	Ma le	No	0	Grad uate	No	4983	0	141	360	1	Urban	
LP0 025 93	Ma le	Yes	1	Grad uate	No	8333	4000		360	1	Urban	
LP0 025 99	Ma le	Yes	0	Grad uate	No	3667	2000	170	360	1	Semiurba n	
LP0 026 04	Ma le	Yes	2	Grad uate	No	3166	2833	145	360	1	Urban	
LP0 026 05	Ma le	No	0	Not Grad uate	No	3271	0	90	360	1	Rural	
LP0 026 09	Fe ma le	Yes	0	Grad uate	No	2241	2000	88	360	0	Urban	
LP0 026 10	Ma le	Yes	1	Not Graduate		1792	2565	128	360	1	Urban	
LP0 026 12	Fe ma le	Yes	0	Grad uate	No	2666	0	84	480	1	Semiurba n	

LP0 026 14		No	0	Grad uate	No	6478	0	108	360	1	Semiurba n	
LP0 026 30	Ma le	No	0	Not Graduate		3808	0	83	360	1	Rural	
LP0 026 35	Fe ma le	Yes	2	Not Grad uate	No	3729	0	117	360	1	Semiurba n	
LP0 026 39	Ma le	Yes	2	Grad uate	No	4120	0	128	360	1	Rural	
LP0 026 44	Ma le	Yes	1	Grad uate	Yes	7500	0	75	360	1	Urban	
LP0 026 51	Ma le	Yes	1	Grad uate		6300	0	125	360	0	Urban	
LP0 026 54	Fe ma le	No		Grad uate	Yes	14987	0	177	360	1	Rural	
LP0 026 57		Yes	1	Not Grad uate	Yes	570	2125	68	360	1	Rural	
LP0 027 11	Ma le	Yes	0	Grad uate	No	2600	700	96	360	1	Semiurba n	
LP0 027 12	Ma le	No	2	Not Grad uate	No	2733	1083	180	360		Semiurba n	
LP0 027 21	Ma le	Yes	2	Grad uate	Yes	7500	0	183	360	1	Rural	
LP0 027 35	Ma le	Yes	2	Not Grad uate	No	3859	0	121	360	1	Rural	
LP0 027 44	Ma le	Yes	1	Grad uate	No	6825	0	162	360	1	Rural	
LP0 027 45	Ma le	Yes	0	Grad uate	No	3708	4700	132	360	1	Semiurba n	
LP0 027 46	Ma le	No	0	Grad uate	No	5314	0	147	360	1	Urban	
LP0 027 47	Fe ma le	No	3+	Grad uate	No	2366	5272	153	360	0	Rural	
LP0 027 54	Ma le	No		Grad uate	No	2066	2108	104	84	1	Urban	

LP0 027 59	Ma le	Yes	2	Grad uate	No	5000	0	149	360	1	Rural	
LP0 027 60	Fe ma le	No	0	Grad uate	No	3767	0	134	300	1	Urban	
LP0 027 66	Fe ma le	Yes	0	Grad uate	No	7859	879	165	180	1	Semiurba n	
LP0 027 69	Fe ma le	Yes	0	Grad uate	No	4283	0	120	360	1	Rural	
LP0 027 74	Ma le	Yes	0	Not Grad uate	No	1700	2900	67	360	0	Urban	
LP0 027 75		No	0	Not Grad uate	No	4768	0	125	360	1	Rural	
LP0 027 81	Ma le	No	0	Grad uate	No	3083	2738	120	360	1	Urban	
LP0 027 82	Ma le	Yes	1	Grad uate	No	2667	1542	148	360	1	Rural	
LP0 027 86	Fe ma le	Yes	0	Not Grad uate	No	1647	1762	181	360	1	Urban	
LP0 027 90	Ma le	Yes	3+	Grad uate	No	3400	0	80	120	1	Urban	
LP0 027 91	Ma le	No	1	Grad uate		16000	5000	40	360	1	Semiurba n	
LP0 027 93	Ma le	Yes	0	Grad uate	No	5333	0	90	360	1	Rural	
LP0 028 02	Ma le	No	0	Grad uate	No	2875	2416	95	6	0	Semiurba n	
LP0 028 03	Ma le	Yes	1	Not Graduate		2600	618	122	360	1	Semiurba n	
LP0 028 05	Ma le	Yes	2	Grad uate	No	5041	700	150	360	1	Urban	
LP0 028 06	Ma le	Yes	3+	Grad uate	Yes	6958	1411	150	360	1	Rural	
LP0 028 16	Ma le	Yes	1	Grad uate	No	3500	1658	104	360		Semiurba n	

LP0 028 23	Ma le	Yes	0	Grad uate	No	5509	0	143	360	1	Rural	
LP0 028 25	Ma le	Yes	3+	Grad uate	No	9699	0	300	360	1	Urban	
LP0 028 26	Fe ma le	Yes	1	Not Grad uate	No	3621	2717	171	360	1	Urban	
LP0 028 43	Fe ma le	Yes	0	Grad uate	No	4709	0	113	360	1	Semiurba n	
LP0 028 49	Ma le	Yes	0	Grad uate	No	1516	1951	35	360	1	Semiurba n	
LP0 028 50	Ma le	No	2	Grad uate	No	2400	0	46	360	1	Urban	
LP0 028 53	Fe ma le	No	0	Not Grad uate	No	3015	2000	145	360		Urban	
LP0 028 56	Ma le	Yes	0	Grad uate	No	2292	1558	119	360	1	Urban	
LP0 028 57	Ma le	Yes	1	Grad uate	Yes	2360	3355	87	240	1	Rural	
LP0 028 58	Fe ma le	No	0	Grad uate	No	4333	2333	162	360	0	Rural	
LP0 028 60	Ma le	Yes	0	Grad uate	Yes	2623	4831	122	180	1	Semiurba n	
LP0 028 67	Ma le	No	0	Grad uate	Yes	3972	4275	187	360	1	Rural	
LP0 028 69	Ma le	Yes	3+	Not Grad uate	No	3522	0	81	180	1	Rural	
LP0 028 70	Ma le	Yes	1	Grad uate	No	4700	0	80	360	1	Urban	
LP0 028 76	Ma le	No	0	Grad uate	No	6858	0	176	360	1	Rural	
LP0 028 78	Ma le	Yes	3+	Grad uate	No	8334	0	260	360	1	Urban	
LP0 028 79	Ma le	Yes	0	Grad uate	No	3391	1966	133	360	0	Rural	

LP0 028 85	Ma le	No	0	Not Grad uate	No	2868	0	70	360	1	Urban	
LP0 028 90	Ma le	Yes	2	Not Grad uate	No	3418	1380	135	360	1	Urban	
LP0 028 91	Ma le	Yes	0	Grad uate	Yes	2500	296	137	300	1	Rural	
LP0 028 99	Ma le	Yes	2	Grad uate	No	8667	0	254	360	1	Rural	
LP0 029 01	Ma le	No	0	Grad uate	No	2283	15000	106	360		Rural	
LP0 029 07	Ma le	Yes	0	Grad uate	No	5817	910	109	360	1	Urban	
LP0 029 20	Ma le	Yes	0	Grad uate	No	5119	3769	120	360	1	Rural	
LP0 029 21	Ma le	Yes	3+	Not Grad uate	No	5316	187	158	180	0	Semiurba n	
LP0 029 32	Ma le	Yes	3+	Grad uate	No	7603	1213	197	360	1	Urban	
LP0 029 35	Ma le	Yes	1	Grad uate	No	3791	1936	85	360	1	Urban	
LP0 029 52	Ma le	No	0	Grad uate	No	2500	0	60	360	1	Urban	
LP0 029 54	Ma le	Yes	2	Not Grad uate	No	3132	0	76	360		Rural	
LP0 029 62	Ma le	No	0	Grad uate	No	4000	2667	152	360	1	Semiurba n	
LP0 029 65	Fe ma le	Yes	0	Grad uate	No	8550	4255	96	360		Urban	
LP0 029 69	Ma le	Yes	1	Grad uate	No	2269	2167	99	360	1	Semiurba n	
LP0 029 71	Ma le	Yes	3+	Not Grad uate	Yes	4009	1777	113	360	1	Urban	
LP0 029 75	Ma le	Yes	0	Grad uate	No	4158	709	115	360	1	Urban	

LP0 029 80	Ma le	No	0	Grad uate	No	3250	1993	126	360		Semiurba n	
LP0 029 86	Ma le	Yes	0	Grad uate	No	5000	2393	158	360	1	Rural	
LP0 029 89	Ma le	No	0	Grad uate	Yes	9200	0	98	180	1	Rural	

CODE:

```
import pandas as pd
```

```
import matplotlib.pyplot as plt
```

```
#Reading csv file
```

```
df = pd.read_csv('Loan_dataset.csv')
```

```
#----- cleaning Data -----#
```

```
# Dropping such rows where the value for the given column is either na or blank
```

```
df.dropna(subset=['Loan_ID', 'Gender', 'Married', 'Dependents', 'Education', 'Self_Employed',  
'Credit_History', 'Property_Area', 'Loan_Amount_Term'], inplace=True)
```

```
#calculating mean to replace NaN or missing values
```

```
applicant_income_mean = df['ApplicantIncome'].mean()
```

```
co_applicant_income_mean = df['CoapplicantIncome'].mean()
```

```
loan_amt_mean = df['LoanAmount'].mean()
```

```
# replacing Nan or missing values with their mean of theie respective column
```

```
df.fillna({'ApplicantIncome': applicant_income_mean, 'CoapplicantIncome':  
co_applicant_income_mean, 'LoanAmount': loan_amt_mean}, inplace=True)
```

```
#----- population data charts -----#
```

#number of male v/s number of female pi-chart

```
labels = df['Gender'].unique()
```

```
values = [df[df['Gender'] == 'Male'].shape[0], df[df['Gender'] == 'Female'].shape[0]]
```

```
plt.pie(values, labels=labels, startangle= 90, autopct='%1.2f%%')
```

```
plt.title('Gender distribution of population')
```

```
plt.show()
```

#number of grduated v/s number of non graduates pi chart

```
labels = df['Education'].unique()
```

```
values = [df[df['Education'] == 'Graduate'].shape[0], df[df['Education'] == 'Not Graduate'].shape[0]]
```

```
plt.pie(values, labels=labels, startangle=90, autopct='%1.2f%%')
```

```
plt.title('Education distribution chart')
```

```
plt.show()
```

#married v/s unmarried pi chart

```
labels = ['Married', 'Unmarried']
```

```
values = [df[df['Married'] == 'Yes'].shape[0], df[df['Married'] == 'No'].shape[0]]
```

```
plt.pie(values, labels=labels, startangle=90, autopct='%1.2f%%')
```

```
plt.title('marital status distribution chart')
```

```
plt.show()
```

#self-employe v/s not self-employed pi chart

```
labels = ['self Employed', 'Not Self Employed']
```

```
values = [df[df['Self_Employed'] == 'Yes'].shape[0], df[df['Self_Employed'] == 'No'].shape[0]]
```

```
plt.pie(values, labels=labels, startangle=90, autopct='%1.2f%%')
```

```
plt.title('Self Employment distribution chart')
```

```
plt.show()
```

#property area pi chart

```
labels = df['Property_Area'].unique()
```



```
values = [df[df['Property_Area'] == 'Urban'].shape[0], df[df['Property_Area'] ==  
'Semiurban'].shape[0], df[df['Property_Area'] == 'Rural'].shape[0]]
```

```
plt.pie(values, labels=labels, startangle=90, autopct='%1.2f%%')
```

```
plt.title('Property area distribution chart')
```

```
plt.show()
```

```
#---- plotting graphs acceptance rate----#
```

```
#Gender v/s acceptance plot
```

```
labels = df['Gender'].unique()
```

```
values = [df[(df['Gender'] == 'Male') & (df['Credit_History'] == 1)].shape[0] / df[(df['Gender'] ==  
'Male')].shape[0] * 100,
```

```
          df[(df['Gender'] == 'Female') & (df['Credit_History'] == 1)].shape[0] / df[(df['Gender'] ==  
'Female')].shape[0] * 100]
```

```
print(values)
```

```
plt.bar(labels, values)
```

```
plt.show()
```

```
#Marital status v/s acceptance rate
```

```
labels = ['Married', 'Not married']
```

```
values = [df[(df['Married'] == 'Yes') & (df['Credit_History'] == 1)].shape[0] / df[df['Married'] ==  
'Yes'].shape[0] * 100,
```

```
          df[(df['Married'] == 'No') & (df['Credit_History'] == 1)].shape[0] / df[df['Married'] ==  
'No'].shape[0] * 100 ]
```

```
print(values)
```

```
plt.bar(labels, values)
```

```
plt.show()
```

```
#Education v/s acceptance rate
```

```
labels = ['Graduated', 'Not Graduated']
```

```
values = [df[(df['Education'] == 'Graduate') & (df['Credit_History'] == 1)].shape[0] / df[df['Education']  
== 'Graduate'].shape[0] * 100,
```

```
df[(df['Education'] == 'Not Graduate') & (df['Credit_History'] == 1)].shape[0] / df[df['Education']  
== 'Not Graduate'].shape[0] * 100 ]
```

```
print(values)
```

```
plt.bar(labels, values)
```

```
plt.show()
```

#property area v/s acceptance rate

```
labels = (df['Property_Area'].unique())
```

```
values = [df[(df['Property_Area'] == 'Urban') & (df['Credit_History'] == 1)].shape[0] /  
df[df['Property_Area'] == 'Urban'].shape[0] * 100,
```

```
df[(df['Property_Area'] == 'Semiurban') & (df['Credit_History'] == 1)].shape[0] /  
df[df['Property_Area'] == 'Semiurban'].shape[0] * 100,
```

```
df[(df['Property_Area'] == 'Rural') & (df['Credit_History'] == 1)].shape[0] /  
df[df['Property_Area'] == 'Rural'].shape[0] * 100 ]
```

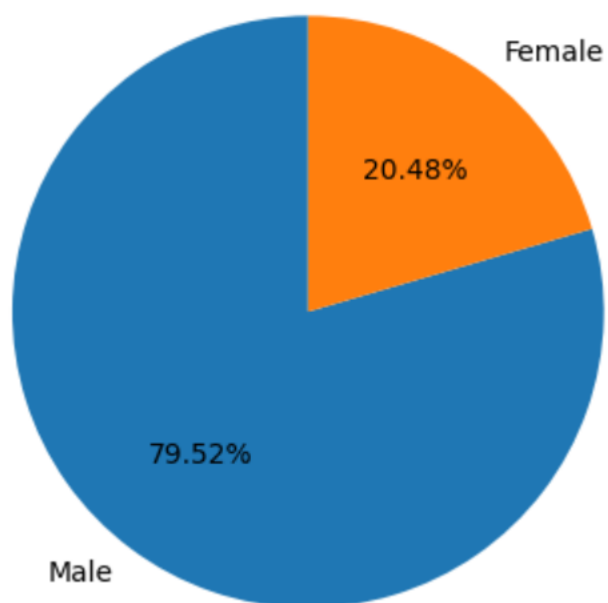
```
print(values)
```

```
plt.bar(labels, values)
```

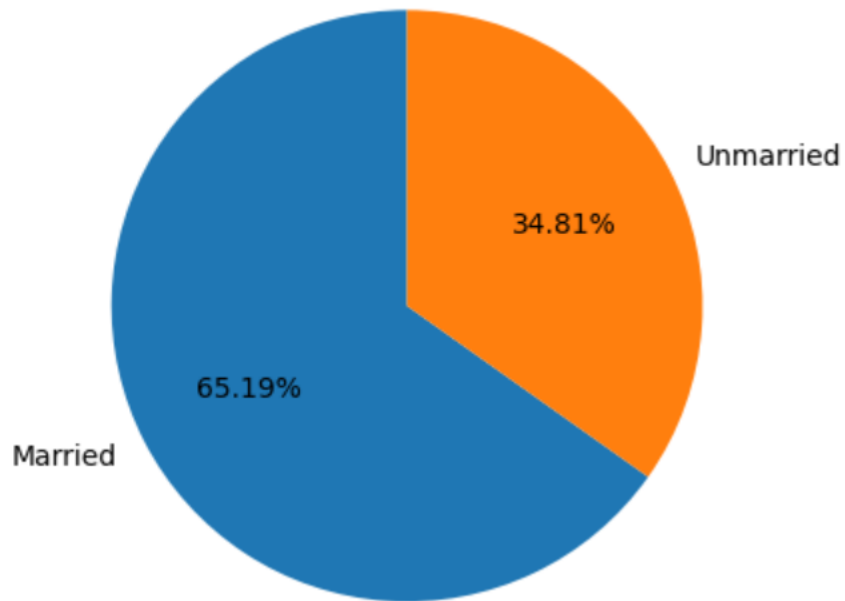
```
plt.show()
```

GRAPHS :

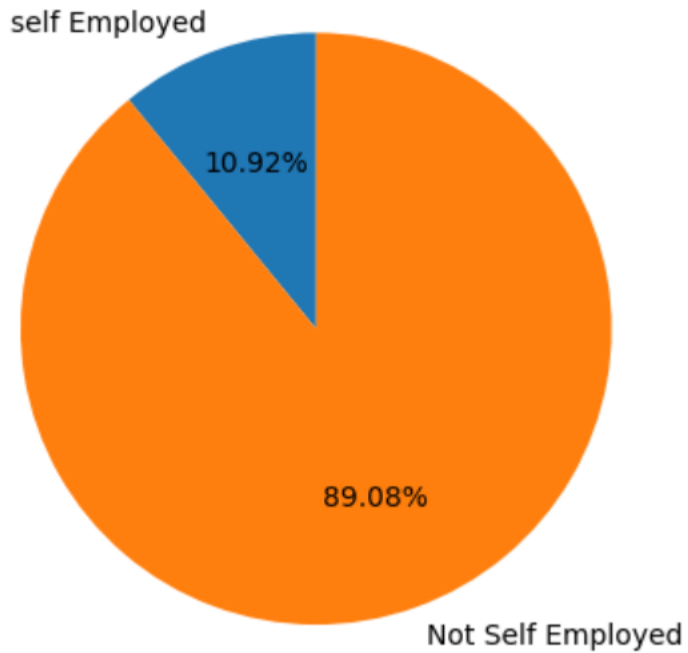
Gender distribution of population



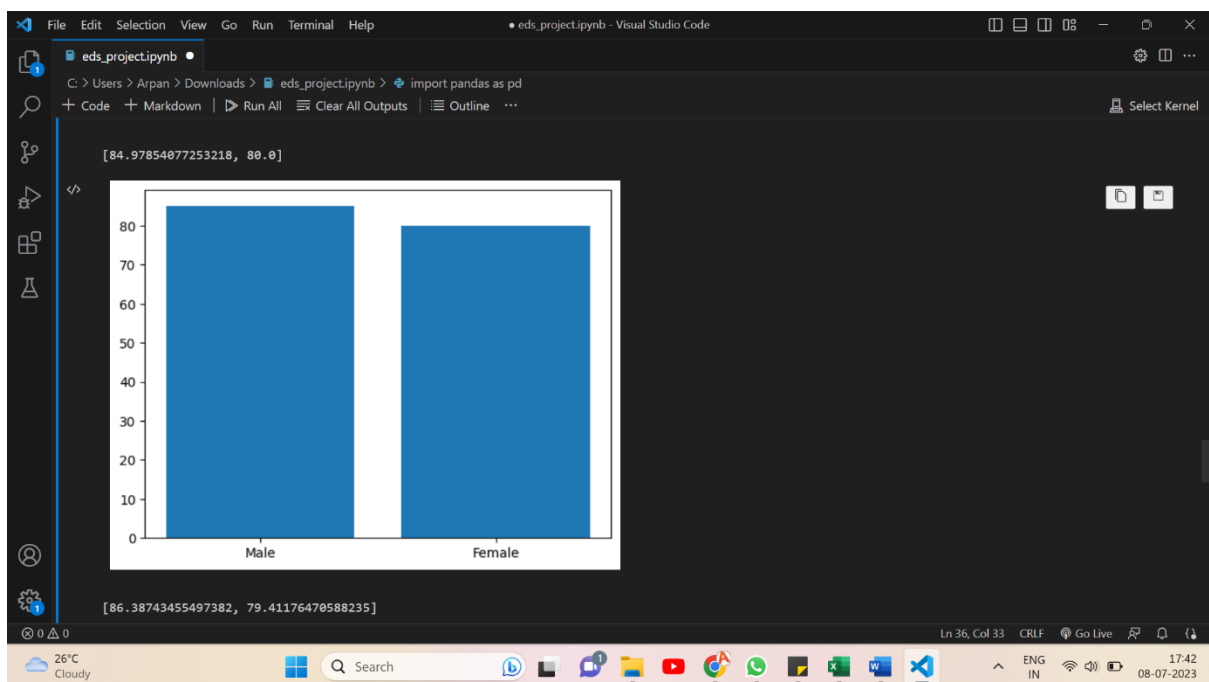
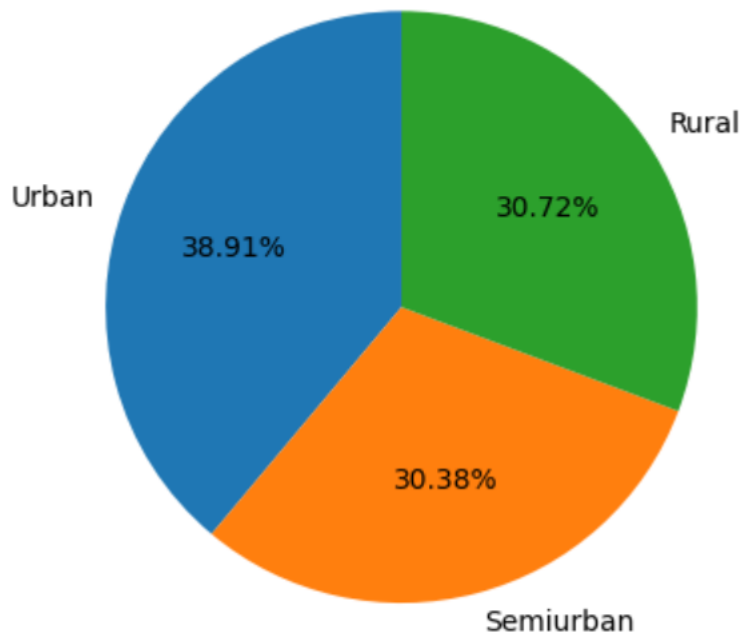
marital status distribution chart

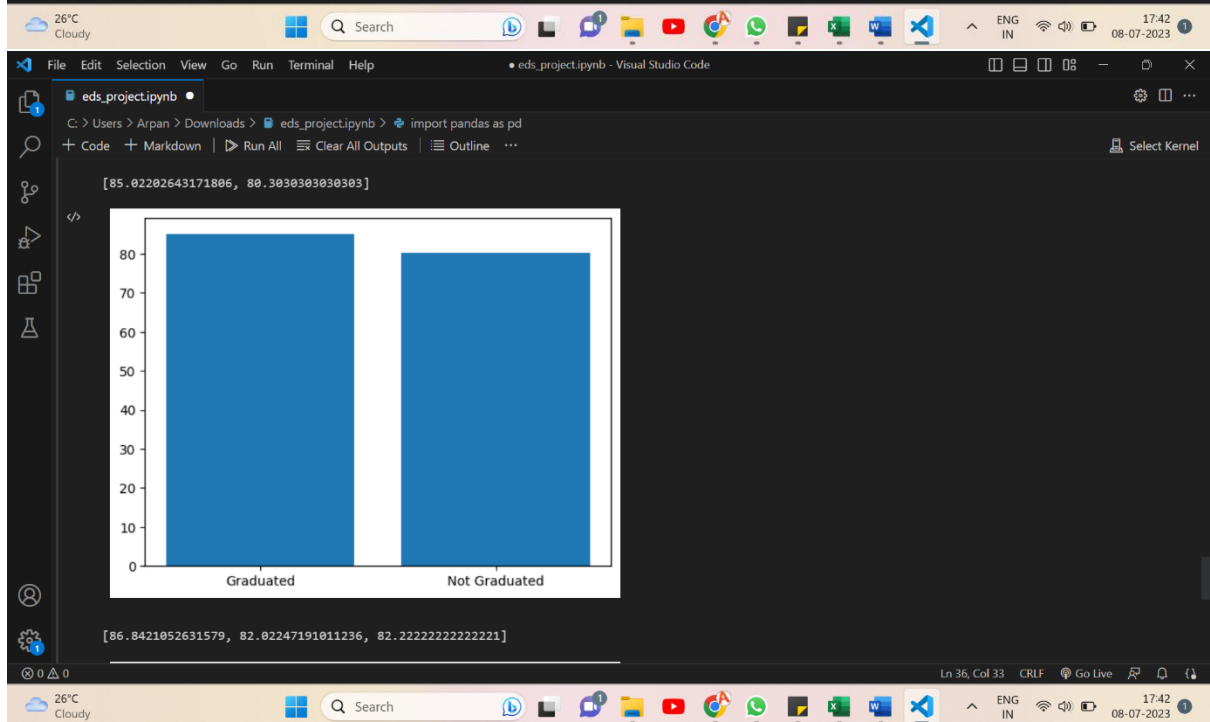
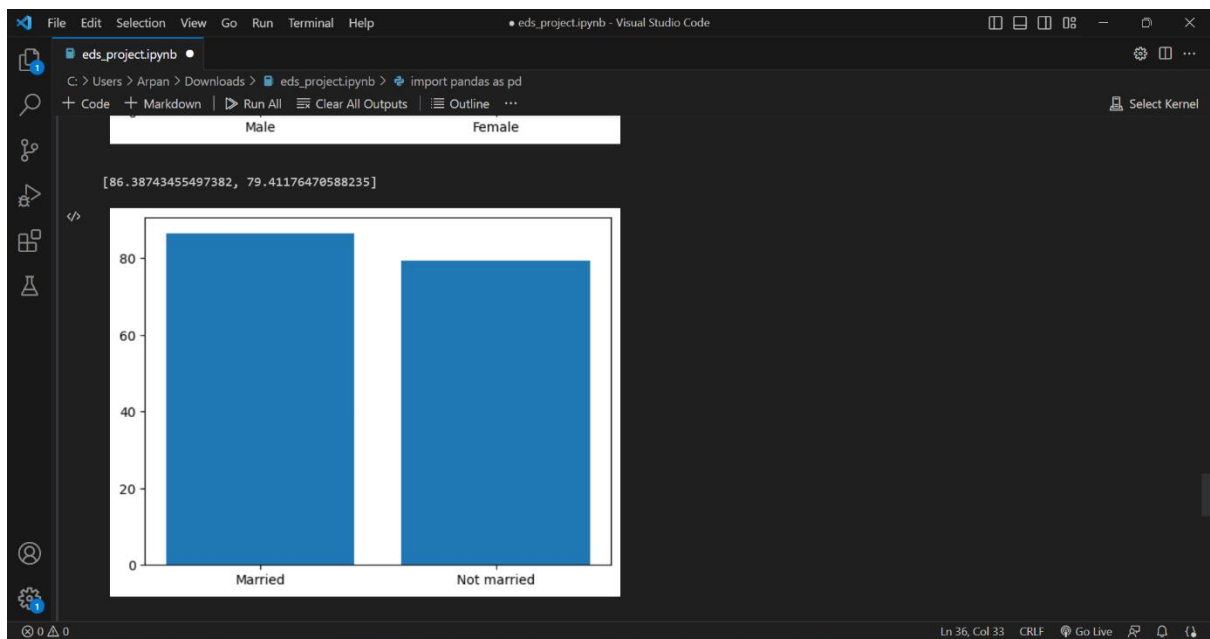


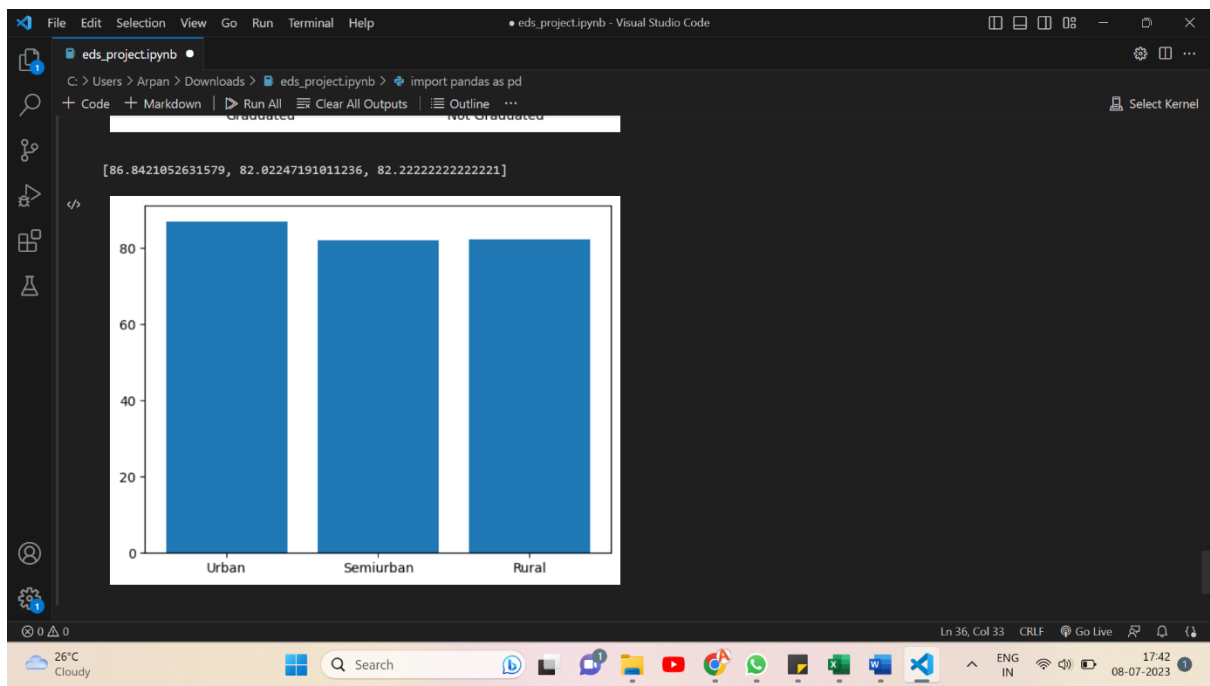
Self Employment distribution chart



Property area distribution chart







Education distribution chart

