Task 6.1

Question 5a

The data that I have chosen for this task is:

Recorded Criminal Incident by month - by LGA

taken from NSW Bureau of Crime Statistics and Research

This data shows the count of crimes comitted in New South Wales in each local government area from January 1995 until September 2022.

Census data by Local Government Areas (LGA) for 2011, 206 and 2021 taken from

Australian Bureau of Statistics

This data contains comprehensaive data about the people who live in each local government area. There is a lot of information in the census data that can be matched to the other dataset that I have chosen to use in order to glean more insights.

Question 5b

I chose these datasets because I think it will be interesting to see how crime has changed over the years, and if anything of the demographics in the area has changed it.

Question 6

In Excel:

Recorded Criminal Incident by month did not need any cleaning.

Cleaning Census data:

Changed the local area government codes to the text version.
Deleted non-relevant data
Removed multiple columns and add information from other 2011 census sheets.
Removed multiple columns and add information from other 2016 census sheets.
Removed multiple columns and add information from other 2021 census sheets.

Consistency Checks:

Checked shape, describe and head of all documents.

Question 7

Census Data (All sheets)

Column	Column Description	Data Type	Time Variant
Tot_P_M	Total_Persons_Males	Quantitative, Discrete	no
Tot_P_F	Total_Persons_Females	Quantitative, Discrete	no
Tot_P_P	Total_Persons_Persons	Quantitative, Discrete	no
Age_0_4_yr_M	Age_groups_0_4_years_Males	Quantitative, Discrete	no
Age_0_4_yr_F	Age_groups_0_4_years_Females	Quantitative, Discrete	no
Age_0_4_yr_P	Age_groups_0_4_years_Persons	Quantitative, Discrete	no
Age_5_14_yr_M	Age_groups_5_14_years_Males	Quantitative, Discrete	no
Age_5_14_yr_F	Age_groups_5_14_years_Females	Quantitative, Discrete	no
Age_5_14_yr_P	Age_groups_5_14_years_Persons	Quantitative, Discrete	no
Age_15_19_yr_M	Age_groups_15_19_years_Males	Quantitative, Discrete	no
Age_15_19_yr_F	Age_groups_15_19_years_Females	Quantitative, Discrete	no
Age_15_19_yr_P	Age_groups_15_19_years_Persons	Quantitative, Discrete	no
Age_20_24_yr_M	Age_groups_20_24_years_Males	Quantitative, Discrete	no
Age_20_24_yr_F	Age_groups_20_24_years_Females	Quantitative, Discrete	no
Age_20_24_yr_P	Age_groups_20_24_years_Persons	Quantitative, Discrete	no
Age_25_34_yr_M	Age_groups_25_34_years_Males	Quantitative, Discrete	no
Age_25_34_yr_F	Age_groups_25_34_years_Females	Quantitative, Discrete	no
Age_25_34_yr_P	Age_groups_25_34_years_Persons	Quantitative, Discrete	no
Age_35_44_yr_M	Age_groups_35_44_years_Males	Quantitative, Discrete	no

Age_35_44_yr_F	Age_groups_35_44_years_Females	Quantitative, Discrete	no
Age_35_44_yr_P	Age_groups_35_44_years_Persons	Quantitative, Discrete	no
Age_45_54_yr_M	Age_groups_45_54_years_Males	Quantitative, Discrete	no
Age_45_54_yr_F	Age_groups_45_54_years_Females	Quantitative, Discrete	no
Age_45_54_yr_P	Age_groups_45_54_years_Persons	Quantitative, Discrete	no
Age_55_64_yr_M	Age_groups_55_64_years_Males	Quantitative, Discrete	no
Age_55_64_yr_F	Age_groups_55_64_years_Females	Quantitative, Discrete	no
Age_55_64_yr_P	Age_groups_55_64_years_Persons	Quantitative, Discrete	no
Age_65_74_yr_M	Age_groups_65_74_years_Males	Quantitative, Discrete	no
Age_65_74_yr_F	Age_groups_65_74_years_Females	Quantitative, Discrete	no
Age_65_74_yr_P	Age_groups_65_74_years_Persons	Quantitative, Discrete	no
Age_75_84_yr_M	Age_groups_75_84_years_Males	Quantitative, Discrete	no
Age_75_84_yr_F	Age_groups_75_84_years_Females	Quantitative, Discrete	no
Age_75_84_yr_P	Age_groups_75_84_years_Persons	Quantitative, Discrete	no
Age_85ov_M	Age_groups_85_years_and_over_Males	Quantitative, Discrete	no
Age_85ov_F	Age_groups_85_years_and_over_Females	Quantitative, Discrete	no
Age_85ov_P	Age_groups_85_years_and_over_Persons	Quantitative, Discrete	no
Indigenous_psns_Aboriginal_M	Indigenous_Persons_Aboriginal_Males	Quantitative, Discrete	no
Indigenous_psns_Aboriginal_F	Indigenous_Persons_Aboriginal_Females	Quantitative, Discrete	no

Indigenous_psns_Aboriginal_P	Indigenous_Persons_Aboriginal_Persons	Quantitative, Discrete	no
Indig_psns_Torres_Strait_Is_M	Indigenous_Persons_Torres_Strait_Islander_Males	Quantitative, Discrete	no
Indig_psns_Torres_Strait_Is_F	Indigenous_Persons_Torres_Strait_Islander_Females	Quantitative, Discrete	no
Indig_psns_Torres_Strait_Is_P	Indigenous_Persons_Torres_Strait_Islander_Persons	Quantitative, Discrete	no
Indig_Bth_Abor_Torres_St_Is_M	Indigenous_Persons_Both_Aboriginal_and_Torres_Strait_Islander_Males	Quantitative, Discrete	no
Indig_Bth_Abor_Torres_St_Is_F	Indigenous_Persons_Both_Aboriginal_and_Torres_Strait_Islander_Females	Quantitative, Discrete	no
Indig_Bth_Abor_Torres_St_Is_P	Indigenous_Persons_Both_Aboriginal_and_Torres_Strait_Islander_Persons	Quantitative, Discrete	no
Indigenous_P_Tot_M	Indigenous_Persons_Total_Males	Quantitative, Discrete	no
Indigenous_P_Tot_F	Indigenous_Persons_Total_Females	Quantitative, Discrete	no
Indigenous_P_Tot_P	Indigenous_Persons_Total_Persons	Quantitative, Discrete	no
Birthplace_Australia_M	Birthplace_Australia_Males	Quantitative, Discrete	no
Birthplace_Australia_F	Birthplace_Australia_Females	Quantitative, Discrete	no
Birthplace_Australia_P	Birthplace_Australia_Persons	Quantitative, Discrete	no
Birthplace_Elsewhere_M	Birthplace_Elsewhere_Males	Quantitative, Discrete	no
Birthplace_Elsewhere_F	Birthplace_Elsewhere_Females	Quantitative, Discrete	no
Birthplace_Elsewhere_P	Birthplace_Elsewhere_Persons	Quantitative, Discrete	no

Lang_spoken_home_Eng_only_M	Language_spoken_at_home_English_only_Males	Quantitative, Discrete	no
Lang_spoken_home_Eng_only_F	Language_spoken_at_home_English_only_Females	Quantitative, Discrete	no
Lang_spoken_home_Eng_only_P	Language_spoken_at_home_English_only_Persons	Quantitative, Discrete	no
Lang_spoken_home_Oth_Lang_M	Language_spoken_at_home_Other_Language_Males	Quantitative, Discrete	no
Lang_spoken_home_Oth_Lang_F	Language_spoken_at_home_Other_Language_Females	Quantitative, Discrete	no
Lang_spoken_home_Oth_Lang_P	Language_spoken_at_home_Other_Language_Persons	Quantitative, Discrete	no
Australian_citizen_M	Australian_citizen_Males	Quantitative, Discrete	no
Australian_citizen_F	Australian_citizen_Females	Quantitative, Discrete	no
Australian_citizen_P	Australian_citizen_Persons	Quantitative, Discrete	no
Age_psns_att_educ_inst_0_4_M	Age_of_Persons_attending_an_educational_institution_0_4_years_Males	Quantitative, Discrete	no
Age_psns_att_educ_inst_0_4_F	Age_of_Persons_attending_an_educational_institution_0_4_years_Females	Quantitative, Discrete	no
Age_psns_att_educ_inst_0_4_P	Age_of_Persons_attending_an_educational_institution_0_4_years_Persons	Quantitative, Discrete	no
Age_psns_att_educ_inst_5_14_M	Age_of_Persons_attending_an_educational_institution_5_14_years_Males	Quantitative, Discrete	no

Age_psns_att_educ_inst_5_14_F	Age_of_Persons_attending_an_educational_institution_5_14_years_Females	Quantitative, Discrete	no
Age_psns_att_educ_inst_5_14_P	Age_of_Persons_attending_an_educational_institution_5_14_years_Persons	Quantitative, Discrete	no
Age_psns_att_edu_inst_15_19_M	Age_of_Persons_attending_an_educational_institution_15_19_years_Males	Quantitative, Discrete	no
Age_psns_att_edu_inst_15_19_F	Age_of_Persons_attending_an_educational_institution_15_19_years_Females	Quantitative, Discrete	no
Age_psns_att_edu_inst_15_19_P	Age_of_Persons_attending_an_educational_institution_15_19_years_Persons	Quantitative, Discrete	no
Age_psns_att_edu_inst_20_24_M	Age_of_Persons_attending_an_educational_institution_20_24_years_Males	Quantitative, Discrete	no
Age_psns_att_edu_inst_20_24_F	Age_of_Persons_attending_an_educational_institution_20_24_years_Females	Quantitative, Discrete	no
Age_psns_att_edu_inst_20_24_P	Age_of_Persons_attending_an_educational_institution_20_24_years_Persons	Quantitative, Discrete	no
Age_psns_att_edu_inst_25_ov_M	Age_of_Persons_attending_an_educational_institution_25_years_and_over_Males	Quantitative, Discrete	no
Age_psns_att_edu_inst_25_ov_F	Age_of_Persons_attending_an_educational_institution_25_years_and_over_Females	Quantitative, Discrete	no
Age_psns_att_edu_inst_25_ov_P	Age_of_Persons_attending_an_educational_institution_25_years_and_over_Persons	Quantitative, Discrete	no
High_yr_schl_comp_Yr_12_eq_M	Highest_year_of_school_completed_Year_12_or_equivalent_Males	Quantitative, Discrete	no

High_yr_schl_comp_Yr_12_eq_F	Highest_year_of_school_completed_Year_12_or_equivalent_Females	Quantitative, Discrete	no
High_yr_schl_comp_Yr_12_eq_P	Highest_year_of_school_completed_Year_12_or_equivalent_Persons	Quantitative, Discrete	no
High_yr_schl_comp_Yr_11_eq_M	Highest_year_of_school_completed_Year_11_or_equivalent_Males	Quantitative, Discrete	no
High_yr_schl_comp_Yr_11_eq_F	Highest_year_of_school_completed_Year_11_or_equivalent_Females	Quantitative, Discrete	no
High_yr_schl_comp_Yr_11_eq_P	Highest_year_of_school_completed_Year_11_or_equivalent_Persons	Quantitative, Discrete	no
High_yr_schl_comp_Yr_10_eq_M	Highest_year_of_school_completed_Year_10_or_equivalent_Males	Quantitative, Discrete	no
High_yr_schl_comp_Yr_10_eq_F	Highest_year_of_school_completed_Year_10_or_equivalent_Females	Quantitative, Discrete	no
High_yr_schl_comp_Yr_10_eq_P	Highest_year_of_school_completed_Year_10_or_equivalent_Persons	Quantitative, Discrete	no
High_yr_schl_comp_Yr_9_eq_M	Highest_year_of_school_completed_Year_9_or_equivalent_Males	Quantitative, Discrete	no
High_yr_schl_comp_Yr_9_eq_F	Highest_year_of_school_completed_Year_9_or_equivalent_Females	Quantitative, Discrete	no
High_yr_schl_comp_Yr_9_eq_P	Highest_year_of_school_completed_Year_9_or_equivalent_Persons	Quantitative, Discrete	no
High_yr_schl_comp_Yr_8_belw_M	Highest_year_of_school_completed_Year_8_or_below_Males	Quantitative, Discrete	no

High_yr_schl_comp_Yr_8_belw_F	Highest_year_of_school_completed_Year_8_or_below_Females	Quantitative, Discrete	no
High_yr_schl_comp_Yr_8_belw_P	Highest_year_of_school_completed_Year_8_or_below_Persons	Quantitative, Discrete	no
High_yr_schl_comp_D_n_g_sch_M	Highest_year_of_school_completed_Did_not_go_to_school_Males	Quantitative, Discrete	no
High_yr_schl_comp_D_n_g_sch_F	Highest_year_of_school_completed_Did_not_go_to_school_Females	Quantitative, Discrete	no
High_yr_schl_comp_D_n_g_sch_P	Highest_year_of_school_completed_Did_not_go_to_school_Persons	Quantitative, Discrete	no
Median_age_persons	Median_age_of_persons	Quantitative, Discrete	no
Median_mortgage_repay_monthly	Median_mortgage_repayment_monthly	Quantitative, Discrete	no
Median_Tot_prsnl_inc_weekly	Median_total_personal_income_weekly	Quantitative, Discrete	no
Median_rent_weekly_	Median_rent_weekly	Quantitative, Discrete	no
Median_Tot_fam_inc_weekly	Median_total_family_income_weekly	Quantitative, Discrete	no
Average_num_psns_per_bedroom	Average_number_of_Persons_per_bedroom	Quantitative, Discrete	no
Median_Tot_hhd_inc_weekly	Median_total_household_income_weekly	Quantitative, Discrete	no
Average_household_size	Average_household_size	Quantitative, Discrete	no
P_Tot_Married	Persons_Total_Married	Quantitative, Discrete	no
P_Tot_Separated	Persons_Total_Separated	Quantitative, Discrete	no

P_Tot_Divorced	Persons_Total_Divorced	Quantitative, Discrete	no
P_Tot_Widowed	Persons_Total_Widowed	Quantitative, Discrete	no
P_Tot_Never_Married	Persons_Total_Never_Married	Quantitative, Discrete	no
P_Tot_Marrd_reg_marrge	Persons_Total_Married_in_a_registered_marriage	Quantitative, Discrete	no
P_Tot_Married_de_facto	Persons_Total_Married_in_a_de_facto_marriage	Quantitative, Discrete	no
P_Tot_Not_married	Persons_Total_Not_married	Quantitative, Discrete	no

Recorded Criminal Incident by month

Column	Column Description	Data Type	Time Variant
LGA	Local Government Area Name	Qualitative	invariant
Offence category	The name of the main offence comitted.	Qualitative	invariant
Subcategory	A furhter clarification of what the offence is.	Qualitative	invariant
Jan 1995 - Sep 2022	The month the offence was done.	quantative	variant

Question 8

There are some limitation in the census data as it only covers the years 2011, 2016 and 2021. There is also some ethical issues with specifying the indigenous australians or non-citizens in the area if you are linking it with crime. The census source is good as it comes directly from the Australian government, but it is information that is filled out by people themselves, so it is self reported. The Recorded Criminal Incident by month is collected by a government department too, so should have not much bias.

Question 10

Does the median income of the area affect the crime rate?
How much does the crime rate change from 1995-2022
Did COVID change anything in the crime rate?
Where is the most crime in NSW and where is the least?