Home Work 1
Q1:

Attribute	Type	Reasoning
time	Interval	The difference in magnitude between all time points is equal, but there is no “true zero” value for time.
latitude	Interval	Both latitudes and longitudes are numerical that can be meaningfully added or subtracted to locate a specific coordinate. Yet, both have an arbitrary zero point
longitude	Interval	
depth	Ratio	Has an exact numerical value, which has an absolute meaningful zero.
mag	Ratio	
magType	Nominal	The type is not specific to a order but is categorical.
nst	Ratio	nst 0 refers to its absence and pertains to a defined zero point.
gap	Ratio	Clearly defined zero point for all.
dmin	interval	No clear indication of a definite zero.
rms	Ratio	Has an absolute zero value for root means square, which would refer to the absence of these attributes.
net	Nominal	Categorical but in no particular order.
id	Nominal	
updated	Interval	Interval data allow for a degree of difference between two values yet has an arbitrary zero only.
place	Order	Represents a categorical variable that assigns a location to an earthquake to the closest region being given priority.

type	Nominal	Is categorical but is not about any specific order.
Horizontal	Ratio	Has an absolute zero value, which would refer to the absence of these attributes.
depthError	Ratio	
magError	Ratio	
magNst	Ratio	
status	Nominal	Have categories are qualitatively not about any specific order.
location	Nominal	
magSource	Nominal	

Q2:

Analytical Data	Reason	Data type
Time with possible values AM or PM.	Time is a categorical value and does not pertain to any inherent order. Time, in this case, is mutually exclusive, and qualitative will be considered nominal by most.	Nominal
ISBNs for books. (Look up the format on the Web)	ISBNs are qualitative and can not be added or multiplied; they have no specific order compared to one another either.	
Bronze, Silver, and Gold medals as awarded at the Olympics.	Discrete values signify different	Ordinal
Brightness as measured by people's judgments.	Discrete, qualitative, and ordinal, as people can rate brightness from 1-10 discreet levels.	
Military rank.	Discrete ranks that are higher or lower than one other.	
Ability to pass light in the following values: opaque, translucent, transparent.	Qualitative and continuous values that can be compared	
Angles as measured in degrees between 0^o and 360^o.	Each angle is at a difference of 1 degree but has a defined zero.	Ratio
Height above sea level	If sea level is taken as 0 defined, then height above will be a numerical value.	
The number of patients in a hospital	Discrete and quantitative hence will be a ratio as each person contributes to a count of one, and no person being present defines a definite 0.	

stance from the center of the HU campus.	For a set center, the numerical value will have a defined 0. Then the magnitude will increase as it is measured to be a further way.	
Brightness is measured by a light meter.	Continuous values over an interval with a defined 0 value if no light is present.	
The density of a substance in grams per cubic centimeter.	Continuous values can be measured in grams per cubic cm. It has a defined 0 when the mass or volume of a given substance is 0.	

Q3:

Type	Attribute	Reason
Nominal	Sex	Can be classified without matter of order. For example, :{ M, F, N/a}
	Major	A major can be a category; the order here doesn't matter. For example: {Cs, Ce, Ee}
	Blood Type	For sports recreational forms, blood type data is often collected; this is categorical yet independent of any specific order.
Ordinal	Academic Year	Because they can be ordered based on their admission year
	Semester	From 1-8, the student can correspond to a single value, which holds meaning.
	Grade	Discrete nominal values that matter in order. From A* to F.
	Awards	A student can achieve categorical awards and matter in order of (prestige and importance)
Interval	CGPA	For any enrolled student, there is no 0 CGPA. However, it can be continuous values up to a max of 4.
	DOB	For each student, there is a set value; this can not be 0.
	Entry test score.	It can be within a range with an arbitrary 0 or lowest possible.

Ratio	Age	For an enrolled student, the age possibly cannot be zero. is the magnitude, which can reflect how old a student is.
	Number of Credits per sem	This can have a defined 0-20 or above in case of overload or semester freeze. Defined 0.
	Fee	Fees paid varies from one student to another; for someone on a complete scholarship, the fees can also be 0.