# Types of Data

### Types of data:

Data types

Numerical: Are numbers (age, weight, BP, number of bikes/people)

Categorical: Are classes (colors, gender, name, ethnicity,)

**Continuous**: Range is infinite, i.e. weight, height

**Discrete**: Values are integers, i.e. number of pedestrian, numbers of cars

Ordinal: Hierarchy in classes- Type of BP (High BP, medium BP, low BP), Size of shirt (S,M,L,XL)

Nominal: No hierarchy- color, gender, name, zip code, etc.

1	ld	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
2	1	5.1	3.5	1.4	0.2	Iris-setosa
3	2	4.9	3.0	1.4	0.2	Iris-setosa
4	3	4.7	3.2	1.3	0.2	Iris-setosa
5	4	4.6	3.1	1.5	0.2	Iris-setosa
6	5	5.0	3.6	1.4	0.2	Iris-setosa
7	6	5.4	3.9	1.7	0.4	Iris-setosa
8	7	4.6	3.4	1.4	0.3	Iris-setosa
9	8	5.0	3.4	1.5	0.2	Iris-setosa
10	9	4.4	2.9	1.4	0.2	Iris-setosa
11	10	4.9	3.1	1.5	0.1	Iris-setosa

Categorical

Numerical (continuous)

1	total_bill	tip	sex	smoker	day	time	size
2	16.99	1.01	Female	No	Sun	Dinner	2
3	10.34	1.66	Male	No	Sun	Dinner	3
4	21.01	3.5	Male	No	Sun	Dinner	3
5	23.68	3.31	Male	No	Sun	Dinner	2
6	24.59	3.61	Female	No	Sun	Dinner	4
7	25.29	4.71	Male	No	Sun	Dinner	4
8	8.77	2.0	Male	No	Sun	Dinner	2
9	26.88	3.12	Male	No	Sun	Dinner	4
10	15.04	1.96	Male	No	Sun	Dinner	2
11	14.78	3.23	Male	No	Sun	Dinner	2

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Numerical? (Continuous)

Н	I .	J	K	L	М	N	0	Р	Q	R	S	Т	U
Month	Status Cha	annel	SKU	Category	Size	Qty	currency	Amount	ship-city	ship-state	ship-postal-code sh	ip-country	y B2B
Dec	Delivered My	yntra	JNE1233-BLUE-KR-031-XXL	kurta	XXL	1	INR	376	MOHALI	PUNJAB	140301	IN	FALSE
Dec	Delivered My	yntra	JNE1233-BLUE-KR-031-XXL	kurta	XXL	1	INR	376	MOHALI	PUNJAB	140301	IN	FALSE
Dec	Delivered My	yntra	SET261-KR-PP-S	Set	S	1	INR	453	KOLKATA	WEST BENGAL	700029	IN	FALSE
Dec	Delivered Ama	nazon	SET110-KR-PP-M	Set	M	1	INR	729	THANJAVUR	TAMIL NADU	613007	IN	FALSE
Dec	Delivered My	yntra	JNE2294-KR-A-XXL	kurta	XXL	1	INR	544	GURUGRAM	HARYANA	122001	IN	FALSE
Dec	Delivered Flip	pkart	JNE3797-KR-XXL	Western Dress	XXL	One	INR	735	SANGLI MIRAJ KUPWAD	MAHARASHTRA	416436	IN	FALSE
Dec	Delivered Mee	eesho	JNE3801-KR-XXL	kurta	XXL	One	INR	735	BENGALURU	KARNATAKA	560029	IN	FALSE
Dec	Delivered Oth	thers	JNE3405-KR-M	kurta	M	One	INR	435	GURUGRAM	HARYANA	122001	IN	FALSE
Dec	Delivered Ama	nazon	JNE3474-KR-E-XL	kurta	XL	One	INR	385	BENGALURU	KARNATAKA	562149	IN	FALSE
Dec	Delivered My	yntra	JNE3466-KR-L	kurta	L	One	INR	771	VIJAYAWADA	ANDHRA PRADESH	520002	IN	FALSE
Dec	Delivered Ama	nazon	JNE3795-KR-S	kurta	S	One	INR	517	THIRUVANANTHAPURAM	KERALA	695018	IN	FALSE
Dec	Delivered My	yntra	J0181-TP-M	Тор	M	1	INR	399	ARAKONAM	TAMIL NADU	631003	IN	FALSE
Dec	Delivered Ama	nazon	SET217-KR-PP-XL	Set	XL	1	INR	786	GUWAHATI	ASSAM	781017	IN	FALSE
Dec	Delivered My	yntra	SET185-KR-NP-M	Set	M	1	INR	911	BENGALURU	KARNATAKA	562125	IN	FALSE
Dec	Delivered Ama	nazon	SET333-KR-DPT-M	Set	M	1	INR	967	HYDERABAD	TELANGANA	500098	IN	FALSE
Dec	Delivered Na	lalli	J0124-TP-L	Тор	L	1	INR	523	NEW DELHI	DELHI	110062	IN	FALSE
Dec	Delivered Med	eesho	SET304-KR-DPT-XL	Set	XL	1	INR	1115	Bhubaneswar	ODISHA	751022	IN	FALSE
Dec	Delivered Oth	thers	SET184-KR-PP-XS	Set	XS	1	INR	563	SIROHI	RAJASTHAN	307001	IN	FALSE
Dec	Delivered My	yntra	J0161-DR-XXL	Western Dress	XXL	1	INR	473	MUMBAI	MAHARASHTRA	400097	IN	FALSE
Dec	Delivered Ama	nazon	SET233-KR-PP-M	Set	M	1	INR	545	AMRITSAR	PUNJAB	143001	IN	FALSE
Dec	Delivered Na	lalli	J0231-SKD-XXXL	Set	3XL	1	INR	1164	LUCKNOW	UTTAR PRADESH	226024	IN	FALSE
Dec	Refunded My	yntra	J0339-DR-XXL	Western Dress	XXL	1	INR	743	NEW DELHI	DELHI	110087	IN	FALSE

Contegorical (Nominal)

Categorical (ordinal) Categorical (Nominal)

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Month	Status Channel	SKU	Category	Size	Qty	currency	Amount	ship-city	ship-state	ship-postal-code s	hip-countr	у В2В
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Dec	Delivered Myntra	SET261-KR-PP-S	Set	S	1	INR	453	KOLKATA	WEST BENGAL	700029	IN	FALSE
Dec	Delivered Amazon	SET110-KR-PP-M	Set	M	1	INR	729	THANJAVUR	TAMIL NADU	613007	IN	FALSE
Dec	Delivered Myntra	JNE2294-KR-A-XXL	kurta	XXL	1	INR	544	GURUGRAM	HARYANA	122001	IN	FALSE
Dec	Delivered Flipkart	JNE3797-KR-XXL	Western Dress	XXL	One	INR	735	SANGLI MIRAJ KUPWAD	MAHARASHTRA	416436	IN	FALSE
Dec	Delivered Meesho	JNE3801-KR-XXL	kurta	XXL	One	INR	735	BENGALURU	KARNATAKA	560029	IN	FALSE
Dec	Delivered Others	JNE3405-KR-M	kurta	M	One	INR	435	GURUGRAM	HARYANA	122001	IN	FALSE
Dec	Delivered Amazon	JNE3474-KR-E-XL	kurta	XL	One	INR	385	BENGALURU	KARNATAKA	562149	IN	FALSE
Dec	Delivered Myntra	JNE3466-KR-L	kurta	L	One	INR	771	VIJAYAWADA	ANDHRA PRADESH	520002	IN	FALSE
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Dec	Delivered Nalli	J0124-TP-L	Тор	L	1	INR	523	NEW DELHI	DELHI	110062	IN	FALSE
Dec	Delivered Meesho	SET304-KR-DPT-XL	Set	XL	1	INR	1115	Bhubaneswar	ODISHA	751022	IN	FALSE
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### What types of data are collected?

- Structured data: Data that can be organized into columns, such as in a spreadsheet
- Unstructured data: Data that can't be organized into columns, such as text, photos, or videos
- Categorical data: Data that represents an object using categories, such as gender, color of shirt, etc.
- Numerical data: Data that is collected as numbers, such as the number of students in a class
- Time series data: Data that is collected over time, such as temperature readings or stock exchange data
- Text data: Data that is text-based, such as articles or blogs