

```
library(tidyr)
data <- read.csv("../data/pivoted_data.csv")
print(data)
```

##	ZONE	Organism	X1	X2	X3	X4	X5	X6	X7	X8
## 1	L	YELLOW	0	2	1	0	1	1	3	1
## 2	L	ORANGE	6	14	0	8	12	12	0	1
## 3	L	RED	0	10	1	0	3	0	1	0
## 4	L	UNKNOWN_OTHER_PORIFERA	4	2	0	2	2	4	2	0
## 5	L	ANEMONE	4	0	0	2	0	5	0	0
## 6	L	AGGREGATING.ANEMONE	0	0	0	0	0	0	0	0
## 7	L	PURPLE.ENCrustING.HYDROCORAL	0	0	0	0	0	0	0	0
## 8	L	HYDROID	0	0	0	0	0	0	0	0
## 9	L	PACIFIC.SEA.NETTLE	0	0	0	0	0	0	0	0
## 10	L	LION.S.MANE	0	0	0	0	0	0	0	0
## 11	L	MOON	0	0	0	0	0	0	0	0
## 12	L	EGG	0	0	0	0	0	0	0	0
## 13	L	PLATYHELMINTHES	0	0	0	0	0	0	0	0
## 14	L	NEMERTEA	0	0	2	4	6	3	0	0
## 15	L	ANNELIDA	5	4	2	6	40	3	5	8
## 16	L	ANNELIDA_TUBEWORM	22	8	7	29	41	3	4	3
## 17	L	CHITON_LINED	6	16	6	19	3	7	1	6
## 18	L	CHITON_MOSSY	3	0	0	1	0	4	6	3
## 19	L	CHITON_HAIRY	4	1	0	0	0	1	0	0
## 20	L	CHITON_LEATHER	0	0	0	0	0	0	0	0
## 21	L	LIMPET	5	6	36	10	0	5	51	19
## 22	L	TOPSNAIL	1	19	23	54	0	0	1	0
## 23	L	TURBAN_SNAIL	0	0	8	11	0	0	0	0
## 24	L	MARGARITE	0	0	0	0	0	0	0	0
## 25	L	PERIWINKLE	0	0	0	0	0	0	0	0
## 26	L	BITTIUM	0	4	0	0	0	0	0	0
## 27	L	WENTLETRAP	0	0	0	0	0	0	0	0
## 28	L	DOGWINKLE	0	2	0	6	0	2	0	0
## 29	L	WELK	8	5	0	1	0	4	5	9
## 30	L	OLIVE	0	0	0	0	0	0	0	0
## 31	L	OTHER_UNKNOWN_GASTROPODA	9	13	5	0	0	0	7	4
## 32	L	SEA_CLOWN	0	0	0	0	2	0	0	0
## 33	L	DORID	0	0	0	0	0	0	0	2
## 34	L	SEA_LEMON	0	0	0	0	1	1	0	0
## 35	L	OTHER_UNKNOWN_OPISTHOBRANCHIA	0	0	0	0	1	0	0	0
## 36	L	MUSSEL	0	0	0	0	0	0	3	0
## 37	L	OYSTER	7	8	1	2	0	0	2	0
## 38	L	CLAM	3	5	1	3	5	1	2	4
## 39	L	SCALLOP	0	0	0	0	0	0	1	0
## 40	L	OTHER_UNKNOWN_BIVALVIA	0	0	2	0	0	0	4	0
## 41	L	BARNACLES	0	0	0	4	6	8	0	0
## 42	L	ISOPODS	0	0	0	0	0	0	5	0
## 43	L	AMPHIPODS	0	1	4	4	7	3	4	9
## 44	L	SHRIMP	0	0	0	0	0	0	0	0
## 45	L	BLACK_CLAWED	19	1	13	1	19	25	17	14
## 46	L	HEMIGRAPUS	8	0	0	5	1	0	2	2
## 47	L	HERMIT_CRABS	3	12	10	49	4	10	6	17
## 48	L	KELP	1	3	1	11	3	4	2	0
## 49	L	PORCELAIN	9	9	1	17	20	20	51	19

## 50	L	ROCK	3	0	0	2	5	1	0	0
## 51	L	OTHER_UNKNOWN_DECAPODA	0	0	2	0	1	2	0	8
## 52	L	ORANGE_ENCRUSTING	0	1	1	1	0	0	0	0
## 53	L	OTHER_UNKNOWN_BRYOZOA	0	3	1	1	0	4	2	0
## 54	L	BLOOD	0	0	0	2	1	0	0	0
## 55	L	EVASTERIAS..MOTTLED.	0	0	0	3	2	0	0	0
## 56	L	LEATHER	0	1	1	2	3	1	0	0
## 57	L	LEPTASTERIAS..SIX.RAYED.	4	1	1	2	10	8	5	7
## 58	L	PISASTER	2	0	0	0	0	0	0	0
## 59	L	BRITTLE	0	1	0	1	15	2	3	4
## 60	L	URCHIN	21	0	0	2	0	9	0	0
## 61	L	CUCUMBER	39	5	7	11	6	25	6	12
## 62	L	TUNICATE	0	18	0	0	4	1	0	0
## 63	L	SEA_SQUIRT	2	6	1	7	4	2	3	3
## 64	L	OTHER_UNKNOWN_TUNICATA	1	0	0	0	0	0	0	0
## 65	L	CLINGFISH	0	0	0	0	0	0	1	0
## 66	L	SCULPIN	0	0	0	0	0	0	0	0
## 67	L	GUNNEL	7	1	7	4	8	6	9	12
## 68	L	OTHER_UNKNOWN_OSTEICHTHYES	0	0	0	1	0	0	0	0
## 69	M	YELLOW	0	0	0	0	0	0	0	0
## 70	M	ORANGE	0	0	1	4	0	0	0	0
## 71	M	RED	0	1	1	0	1	0	0	0
## 72	M	UNKNOWN_OTHER_PORIFERA	1	2	0	0	0	0	0	0
## 73	M	ANEMONE	1	1	2	2	0	1	0	0
## 74	M	AGGREGATING.ANEMONE	0	0	0	0	0	0	0	0
## 75	M	PURPLE.ENCRUSTING.HYDROCORAL	0	0	0	0	0	0	0	0
## 76	M	HYDROID	0	0	0	0	0	0	0	0
## 77	M	PACIFIC.SEA.NETTLE	0	0	0	0	0	0	0	0
## 78	M	LION.S.MANE	0	0	0	0	0	0	0	0
## 79	M	MOON	0	0	0	0	0	0	0	0
## 80	M	EGG	0	0	0	0	0	0	0	0
## 81	M	PLATYHELMINTHES	0	0	0	0	0	0	0	0
## 82	M	NEMERTEA	0	0	0	0	0	1	0	0
## 83	M	ANNELIDA	5	3	1	2	0	1	3	1
## 84	M	ANNELIDA_TUBEWORM	0	5	1	0	0	0	6	5
## 85	M	CHITON_LINED	0	4	8	10	2	10	0	2
## 86	M	CHITON_MOSSY	1	5	5	4	1	13	9	1
## 87	M	CHITON_HAIRY	3	10	3	2	0	1	0	2
## 88	M	CHITON_LEATHER	0	4	2	2	1	1	1	0
## 89	M	LIMPET	50	164	93	117	27	88	155	27
## 90	M	TOPSNAIL	0	0	2	10	3	32	1	0
## 91	M	TURBAN_SNAIL	0	20	0	13	38	7	0	0
## 92	M	MARGARITE	0	0	0	0	0	0	0	0
## 93	M	PERIWINKLE	0	0	0	0	0	0	0	0
## 94	M	BITTIUM	0	0	0	0	0	0	0	0
## 95	M	WENTLETRAP	0	0	0	0	0	0	0	0
## 96	M	DOGWINKLE	12	5	7	6	0	0	1	0
## 97	M	WELK	3	7	6	4	0	2	24	7
## 98	M	OLIVE	0	0	0	0	0	0	0	0
## 99	M	OTHER_UNKNOWN_GASTROPODA	4	20	7	2	0	7	50	0
## 100	M	SEA_CLOWN	0	0	0	0	0	0	0	0
## 101	M	DORID	0	0	0	0	0	0	0	0
## 102	M	SEA_LEMON	0	0	1	0	0	0	0	0
## 103	M	OTHER_UNKNOWN_OPISTHOBRANCHIA	0	1	0	0	0	0	0	0

## 104	M	MUSSEL	4	0	0	8	0	6	6	0
## 105	M	OYSTER	1	8	1	4	0	4	2	0
## 106	M	CLAM	0	2	0	1	0	1	0	0
## 107	M	SCALLOP	0	0	0	0	0	0	0	0
## 108	M	OTHER_UNKNOWN_BIVALVIA	0	0	1	0	0	0	0	0
## 109	M	BARNACLES	0	5	2	1	3	8	0	0
## 110	M	ISOPODS	4	0	0	0	4	4	0	1
## 111	M	AMPHIPODS	0	1	3	0	0	1	0	0
## 112	M	SHRIMP	0	0	0	2	0	0	0	0
## 113	M	BLACK_CLAWED	4	0	3	0	0	2	5	2
## 114	M	HEMIGRAPUS	0	13	1	24	1	5	51	0
## 115	M	HERMIT_CRABS	0	28	20	92	31	16	32	4
## 116	M	KELP	3	0	1	6	0	0	3	0
## 117	M	PORCELAIN	5	3	2	0	0	3	36	39
## 118	M	ROCK	0	1	0	0	0	0	0	1
## 119	M	OTHER_UNKNOWN_DECAPODA	0	0	0	1	0	5	0	10
## 120	M	ORANGE_ENCRUSTING	0	1	0	0	0	0	0	0
## 121	M	OTHER_UNKNOWN_BRYOZOA	0	0	0	0	0	1	1	0
## 122	M	BLOOD	0	1	0	0	0	0	0	2
## 123	M	EVASTERIAS..MOTTLED.	0	0	0	1	0	0	0	0
## 124	M	LEATHER	0	1	0	0	0	0	0	0
## 125	M	LEPTASTERIAS..SIX.RAYED.	2	3	0	16	1	4	8	7
## 126	M	PISASTER	0	0	1	0	0	0	0	0
## 127	M	BRITTLE	0	0	1	0	0	0	0	6
## 128	M	URCHIN	2	3	2	23	1	0	2	0
## 129	M	CUCUMBER	10	9	2	0	0	1	3	15
## 130	M	TUNICATE	0	1	0	0	0	0	0	0
## 131	M	SEA_SQUIRT	1	1	2	0	0	0	0	4
## 132	M	OTHER_UNKNOWN_TUNICATA	0	0	0	0	0	0	0	0
## 133	M	CLINGFISH	0	0	0	0	0	0	0	0
## 134	M	SCULPIN	0	0	0	3	0	0	0	0
## 135	M	GUNNEL	2	0	0	0	0	0	8	3
## 136	M	OTHER_UNKNOWN_OSTEICHTHYES	0	0	0	0	0	0	0	0
## 137	U	YELLOW	0	0	0	0	0	0	0	0
## 138	U	ORANGE	0	0	0	0	0	0	0	0
## 139	U	RED	0	0	0	0	0	0	0	0
## 140	U	UNKNOWN_OTHER_PORIFERA	0	0	0	0	0	0	0	0
## 141	U	ANEMONE	0	0	0	0	0	5	0	0
## 142	U	AGGREGATING.ANEMONE	0	0	0	0	0	3	0	0
## 143	U	PURPLE.ENCRUSTING.HYDROCORAL	0	0	0	0	0	0	0	0
## 144	U	HYDROID	0	0	0	0	0	0	0	0
## 145	U	PACIFIC.SEA.NETTLE	0	0	0	0	0	0	0	0
## 146	U	LION.S.MANE	0	0	0	0	0	0	0	0
## 147	U	MOON	0	0	0	0	0	0	0	0
## 148	U	EGG	0	0	0	0	0	0	0	0
## 149	U	PLATYHELMINTHES	0	0	0	0	0	0	0	0
## 150	U	NEMERTEA	0	0	0	0	0	0	0	0
## 151	U	ANNELIDA	0	0	0	0	0	0	0	5
## 152	U	ANNELIDA_TUBEWORM	0	0	0	0	0	0	0	0
## 153	U	CHITON_LINED	0	0	0	0	0	0	0	1
## 154	U	CHITON_MOSSY	0	0	0	0	0	10	0	4
## 155	U	CHITON_HAIRY	0	0	0	1	0	2	0	1
## 156	U	CHITON_LEATHER	0	0	0	0	0	4	0	0
## 157	U	LIMPET	28	81	33	3	26	4	25	171

## 158	U	TOPSNAIL	0	0	0	14	0	0	0	0
## 159	U	TURBAN_SNAIL	13	0	0	0	0	1	0	0
## 160	U	MARGARITE	0	0	0	0	0	0	0	0
## 161	U	PERIWINKLE	0	0	0	0	0	0	0	0
## 162	U	BITTIUM	0	0	0	0	0	0	0	0
## 163	U	WENTLETRAP	0	0	0	0	0	0	0	0
## 164	U	DOGWINKLE	0	0	0	0	0	0	0	0
## 165	U	WELK	2	0	1	0	0	0	0	8
## 166	U	OLIVE	0	0	0	0	0	0	0	0
## 167	U	OTHER_UNKNOWN_GASTROPODA	0	0	0	0	0	3	0	4
## 168	U	SEA_CLOWN	0	0	0	0	0	0	0	0
## 169	U	DORID	0	0	0	0	0	0	0	0
## 170	U	SEA_LEMON	0	0	0	0	0	0	0	0
## 171	U	OTHER_UNKNOWN_OPISTHOBRANCHIA	0	0	0	0	0	0	0	0
## 172	U	MUSSEL	0	0	0	0	0	5	1	12
## 173	U	OYSTER	0	0	0	1	1	1	0	1
## 174	U	CLAM	0	0	0	0	0	0	0	0
## 175	U	SCALLOP	0	0	0	0	0	0	0	0
## 176	U	OTHER_UNKNOWN_BIVALVIA	0	0	0	0	0	0	0	0
## 177	U	BARNACLES	0	5	0	0	0	5	0	0
## 178	U	ISOPODS	0	0	0	0	0	1	0	1
## 179	U	AMPHIPODS	0	0	0	0	0	0	0	1
## 180	U	SHRIMP	0	0	0	0	0	0	0	0
## 181	U	BLACK_CLAWED	0	0	0	0	0	0	0	0
## 182	U	HEMIGRAPUS	0	0	0	9	0	0	0	0
## 183	U	HERMIT_CRABS	0	0	2	1	0	17	0	1
## 184	U	KELP	0	0	0	0	0	0	0	1
## 185	U	PORCELAIN	0	0	0	0	0	0	0	1
## 186	U	ROCK	0	0	0	0	0	1	0	0
## 187	U	OTHER_UNKNOWN_DECAPODA	0	0	0	0	1	1	4	2
## 188	U	ORANGE_ENCRUSTING	0	0	0	0	0	0	0	0
## 189	U	OTHER_UNKNOWN_BRYOZOA	0	0	0	0	0	0	0	0
## 190	U	BLOOD	0	0	0	0	0	0	0	0
## 191	U	EVASTERIAS..MOTTLED.	0	0	0	0	0	0	0	0
## 192	U	LEATHER	0	0	0	0	0	0	0	0
## 193	U	LEPTASTERIAS..SIX.RAYED.	0	0	0	0	0	0	0	2
## 194	U	PISASTER	0	0	0	0	0	0	0	0
## 195	U	BRITTLE	0	0	0	0	0	0	0	0
## 196	U	URCHIN	0	0	0	0	0	0	0	0
## 197	U	CUCUMBER	0	0	0	0	0	0	0	1
## 198	U	TUNICATE	0	0	0	0	0	0	0	0
## 199	U	SEA_SQUIRT	0	0	0	0	0	0	0	0
## 200	U	OTHER_UNKNOWN_TUNICATA	0	0	0	0	0	0	0	0
## 201	U	CLINGFISH	0	0	0	0	0	0	0	0
## 202	U	SCULPIN	0	0	0	0	0	0	0	0
## 203	U	GUNNEL	0	0	0	0	0	0	0	0
## 204	U	OTHER_UNKNOWN_OSTEICHTHYES	0	0	0	0	0	0	0	0