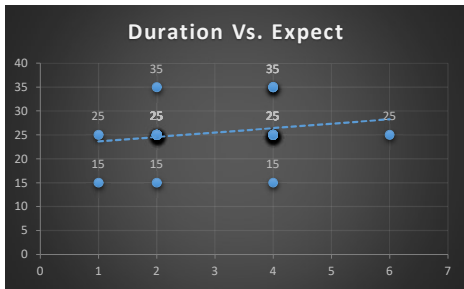
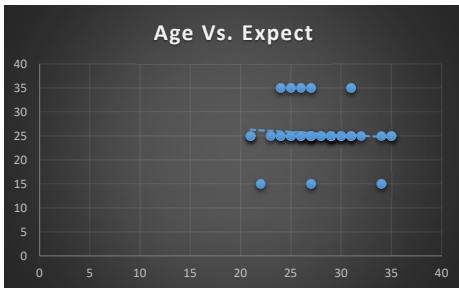
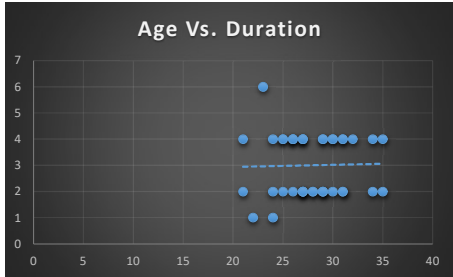


## Correlation Analysis

Objective: Explore potential correlations between factors.

gender	age	Duration	Expect	Duration(Numeric)	Expect (Numeric)
Female	34	1-3 years	20%-30%	2	25
Female	23	More than 5 years	20%-30%	6	25
Male	30	3-5 years	20%-30%	4	25
Male	22	Less than 1 year	10%-20%	1	15
Female	24	Less than 1 year	20%-30%	1	25
Female	24	1-3 years	30%-40%	2	35
Female	27	3-5 years	20%-30%	4	25
Male	21	3-5 years	20%-30%	4	25
Male	35	1-3 years	20%-30%	2	25
Male	31	3-5 years	30%-40%	4	35
Female	35	3-5 years	20%-30%	4	25
Male	29	1-3 years	20%-30%	2	25
Female	21	1-3 years	20%-30%	2	25
Female	28	1-3 years	20%-30%	2	25
Female	25	1-3 years	20%-30%	2	25
Male	27	1-3 years	20%-30%	2	25
Female	28	1-3 years	20%-30%	2	25
Male	27	1-3 years	20%-30%	2	25
Male	29	1-3 years	20%-30%	2	25
Male	26	3-5 years	20%-30%	4	25
Male	29	3-5 years	20%-30%	4	25
Female	24	3-5 years	20%-30%	4	25
Male	27	3-5 years	20%-30%	4	25
Male	25	3-5 years	20%-30%	4	25
Female	26	3-5 years	30%-40%	4	35
Female	32	3-5 years	20%-30%	4	25
Male	26	3-5 years	20%-30%	4	25
Male	31	1-3 years	20%-30%	2	25
Male	29	1-3 years	20%-30%	2	25
Female	34	3-5 years	10%-20%	4	15
Male	27	1-3 years	10%-20%	2	15
Female	31	3-5 years	20%-30%	4	25
Male	27	3-5 years	30%-40%	4	35
Male	26	1-3 years	20%-30%	2	25
Male	27	1-3 years	20%-30%	2	25
Male	30	3-5 years	20%-30%	4	25
Male	30	1-3 years	20%-30%	2	25
Male	25	3-5 years	30%-40%	4	35
Male	31	1-3 years	20%-30%	2	25
Male	29	3-5 years	20%-30%	4	25



Correlation:	Age Vs. Duration	Age Vs. Expect	Duration Vs. Expect
	0.024	-0.090	0.242

### 1. Age vs. Duration (Correlation: 0.024):

The correlation is very close to 0, indicating **no significant linear relationship** between Age and Duration. The data suggests that age does not seem to be strongly related to the duration category (after encoding).

### 2. Age vs. Expect (Correlation: -0.090):

The negative value of the correlation indicates a **very weak inverse relationship** between Age and Expect. However, since the value is close to 0, the relationship is not significant, meaning there is little to no relationship between age and expected percentage range.

### 3. Duration vs. Expect (Correlation: 0.242):

This positive correlation suggests a **weak positive relationship** between Duration (encoded) and Expect (encoded). As the duration category increases, there seems to be a slight increase in the expected percentage range. However, the correlation is still low, so it's not a strong relationship.

## Summary:

None of the correlations are strong enough to suggest a significant relationship, but the **Duration vs. Expect** correlation is the highest, indicating a slightly positive association between the two variables.