***Lab:***

***Course Outcome CO3*:**

***Blooms Taxonomy Level****: BT2,BT3*

Types of Vehicles

|  |  |  |  |
| --- | --- | --- | --- |
| Sold by |  | Small car | Truck |
| U.S. | 85 | 190 |
| International | 300 | 140 |

***For the above data find the solution of following by using Excel***

Q1. Develop a Join distribution set.

Q.2 What are the marginal probabilities and what they tell you about the probabilities associated with?

Q3 If the vehicle was manufactured by a US manufacturer, what is the probability that the vehchile was a small car? **(.3091)**

Q4. If the vehicle was manufactured by a International manufacturer, what is the probability that the vehchile was a Truck? **(.3182)**

Q5. If the vehicle was a truck, what is the probability that it was manufactured by the US manufacturer? (0.5758)

Q6. Find the Joint distribution table for the following.

Q7 Find marginal table for the following.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gender | Rank  R1 R2 R3 | | | Total |
| Male | 30 | 80 | 90 | 200 |
| Female | 20 | 40 | 40 | 100 |
| Total | 50 | 120 | 130 | 300 |