



Experiment No. 7

July 25, 2019, 2:02 pm

Modal Split

Input Values :

Trip Characteristics						
	tu(ij)	tw(ij)	tt(ij)	Fij	pC	phi(j)
Bus	30	8	10	8	0	20
Car	20	0	0	0	40	10
Two Wheeler	15	0	0	0	20	5
Train	8	5	5	4	0	0
ai	0.5	0.5	0.5	0.5	0.5	0.5

Cost of travel by Bus = $0.5 * 30 + 0.5 * 8 + 0.5 * 10 + 0.5 * 8 + 0.5 * 0 + 20 * 0.5 = 38$

Cost of travel by Car = $0.5 * 20 + 0.5 * 0 + 0.5 * 0 + 0.5 * 0 + 0.5 * 40 + 10 * 0.5 = 35$

Cost of travel by Two Wheeler = $0.5 * 15 + 0.5 * 0 + 0.5 * 0 + 0.5 * 0 + 0.5 * 20 + 5 * 0.5 = 20$

Cost of travel by Train = $0.5 * 8 + 0.5 * 5 + 0.5 * 5 + 0.5 * 4 + 0.5 * 0 + 0 * 0.5 = 11$

Probability of choosing mode, Bus = 1.8792968928032E-12

Probability of choosing mode, Car = 3.7746687130031E-11



Probability of choosing mode, Two Wheeler = 0.00012339457598134

Probability of choosing mode, Train = 0.99987660538439

Proportion of Trips by Bus = $1.8792968928032E-12 * 1416698 = 2.6623961494406E-6$

Proportion of Trips by Car = $3.7746687130031E-11 * 1416698 = 5.3475656163741E-5$

Proportion of Trips by Two Wheeler = $0.00012339457598134 * 1416698 = 174.81284900362$

Proportion of Trips by Train = $0.99987660538439 * 1416698 = 1416523.1870949$

Fare Collected from Bus = $2.6623961494406E-6 * 38 = 0.00010117105367874$

Fare Collected from Car = $5.3475656163741E-5 * 35 = 0.0018716479657309$

Fare Collected from Two Wheeler = $174.81284900362 * 20 = 3496.2569800723$

Fare Collected from Train = $1416523.1870949 * 11 = 15581755.058043$

Solutions										
	tu(ij)	tw(ij)	tt(ij)	Fij	pC	phi(j)	C	eC	P(ij)	T(ij)
Bus	30	8	10	8	0	20	38	0	0	0
Car	20	0	0	0	40	10	35	0	0	0.0001
Two Wheeler	15	0	0	0	20	5	20	0	0.0001	174.8128
Train	8	5	5	4	0	0	11	0	0.9999	1416523.1871
ai	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-