```
No. of passengers=3000,

End_sim_time = 5000,

getSpottingsNowTime = 2000,

peakThres=5 (500 meters both sides)

PosConf calculated for each point at distance of= 100 meters

Starting time gap between trains=8.33 min (500 sec)

Halt_time_of_Train = 20 sec

Speed_of_The_Train = 14 m/sec (50.4 km/h)
```

0.0.1 With no of trains=1

	Α	В	С	D	E					
1	Distance	PosnConf	NumUserInput	isPeak		102	1267	1 Stopped Western	Dondro	un
5	23100	1	. 1117	true	Jogeshwari	193		1 Stopped_Western		up
16	23200	1	. 1117	true		217	1404	1 Stopped_Western	Khar Road	up
17	23300	1	1117	true		233	1518	1 Stopped Western	Santacruz	up
8	23400		. 1117			251	1685	1 Stopped Western		up
9	23500		. 1117			265	1859	1 Stopped Western		
20	23600	1	. 1117	true						up
21	23700	1	1117	true		277	2000	1 Stopped_Western	Jogeshwari	up
22	23800		. 1117	true		295	2261	1 Stopped_Western	Goregaon	up
23	23900		. 1117			313	2454	1 Stopped Western		up
24	24000		. 1117			331	2610	1 Stopped_Western		
25	24100	1	. 1117	true						up
26	24200	1	. 1117	true		355	2827	1 Stopped_Western	Borivali	up
27	24300	1	1117	true		373	3016	1 Stopped Western	Dahisar	up
28	24400	1	1117	true		391	3280	1 Stopped Western		up
29	24500	1	1117	true		/115	3530	1 Stopped_Western		up
42 43							2740		Enacannai	
13							٦.	0 D 1	C +1	

Figure 1: Predicted positions of the trains

Figure 2: Real positions of the trains

0.0.2 With no of trains=2

1	Distance	PosnConf	NumUserInput	isPeak					
15	22900	1	1102						
16	23000		1102		Jogeshwari	1536	2 Stopped Western	Palghar	down
17	23100		1102				Z Otopped_Western	Condition	down
18	23200		1102			1685	1 Stopped_Western	Vile <u>Parle</u>	up
19	23300		1102			1000		*****	- up
20 21	23400 23500		1102 1102			1859	1 Stopped Western	Andheri	up
22	23600		1102						
23	23700		1102			2000	1 Stopped Western	Jogeshwari	up
24	23800		1102						
25	23900	1	1102	true		2154	2 Stopped Western	Kelve Road	down
26	24000	1	1102	true					
27	24100	1	1102	true		2261	1 Stopped Western	Goregaon	up
28	24200	1	1102	true					
29	24300		1102			2454	1 Stopped_Western	Malad	up
50	84200			true	Kelve road				
51	84300			true	<u> </u>	2589	2 Stopped Western	Saphale	down
62	84400			true					
53_	84500	1	. 258	true					
2									

Figure 3: Predicted positions of the trains

Figure 4: Real positions of the trains

0.0.3 With no of trains=3

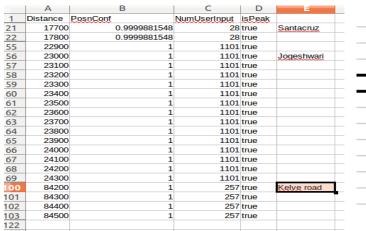


Figure 5: Predicted positions of the trains

1767	3 Stopped Western	Bandra	up
1859	1 Stopped Western	Andheri	up
1904	3 Stopped_Western	Khar Road	up
2000	1 Stopped_Western	Jogeshwari	up
2018	3 Stopped_Western	Santacruz	up
2154	2 Stopped_Western	Kelve Road	down
2185	3 Stopped_Western	Vile Parle	up
2261	1 Stopped_Western	Goregaon	up
2359	3 Stopped_Western	Andheri	up
2454	1 Stopped_Western	Malad	up
2500	3 Stopped_Western	Jogeshwari	up
2580	2 Stonnad Wastern	Sanhala	down

Figure 6: Real positions of the trains

0.0.4 With no of trains=4



Figure 7: Predicted positions of the trains

659	1685	1 Stopped_Western	Vile Parle	up
677	1767	3 Stopped_Western	Bandra	up
707	1859	1 Stopped_Western	Andheri	up
735	1904	3 Stopped_Western	Khar Road	up
765	2000	1 Stopped_Western	Jogeshwari	up
777	2018	3 Stopped_Western	Santacruz	up
785	2036	4 Stopped_Western	Palghar	down
815	2154	2 Stopped_Western	Kelve Road	down
833	2185	3 Stopped_Western	Vile Parle	up
847	2261	1 Stopped_Western	Goregaon	up
871	2359	3 Stopped_Western	Andheri	up
907	2454	1 Stopped_Western	Malad	up
935	2500	3 Stopped_Western	Jogeshwari	up
961	2589	2 Stopped Western	Saphale	down

Figure 8: Real positions of the trains

0.0.5 With no of trains=5

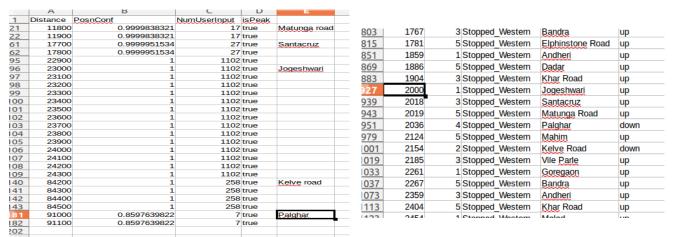


Figure 9: Predicted positions of the trains

Figure 10: Real positions of the trains

up

up

up

up

up

up

up

down

down

down

up

up

up

up

up

up

0.0.6 With no of trains=6

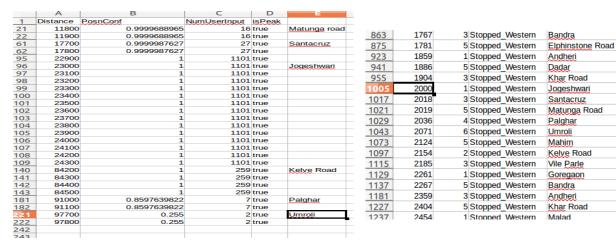


Figure 11: Predicted positions of the trains

Figure 12: Real positions of the trains

0.0.7 With no of passengers= 100000 and no of trains=5

		Sheet1							
Distance PosnConf	NumUs	erInput isPeak	Stations						
11500	1	703 true							
11600	1	703 true							
11700	1	703 true							
11800	1	703 true	Matunga road						
11900	1	703 true							
12000	1	703 true							
12100	1	703 true							
12200	1	703 true							
17400	1	853 true							
17500	1	853 true							
17600	1	853 true							
17700	1	853 true	Santacruz		A	В		U	
17800	1	853 true	Samaciuz	1	Distance			isPeak	_
17900	i	853 true		21	11800			true	Matunga
	1			22	11900			true	in a contract
18000		853 true		61	17700			true	Santacruz
18100	1	853 true		62	17800	0.9999951534		true	
22900	1	38090 true		95	22900	1	1102	true	
23000	1	38090 true	Jogeshwari	96	23000	1	1102	true	Jogeshwa
23100	1	38090 true		97	23100		1102	true	
23200	1	38090 true		98	23200				
23300	1	38090 true		99	23300	1			
23400	1	38090 true		100	23400	1			
23500	1	38090 true		101	23500	1			
23600	1	38090 true		102	23600				
23700	1	38090 true		103	23700				
23800	1	38090 true		104	23800	1			
23900	1	38090 true		105	23900 24000	1			
24000	1	38090 true		106	24100				
24100	1	38090 true		107	24200				
24200	1	38090 true		109	24300				
24300	1	38090 true		140	84200	1		true	Kelve roa
83600	1	8283 true		141	84300	1		true	District Con-
84200	1	8283 true	Kelve road	142	84400	1		true	
84300	1	8283 true		143	84500	1	258	true	
84400	1	8283 true		81	91000	0.8597639822	7	true	Palghar
84500	1	8283 true		182	91100	0.8597639822	7	true	
85100	1	8283 true		202					
90300	1	228 true			1			1	
90900	1	228 true							
91000	1	228 true	Palghar	Figur	ro 1/1.	Predicted po	eitione o	f the	a trair
91100	1	228 true	i aignai	rigu	10 14.	r rearcied be	omorios C	1 0116	ouan.
91100	1	228 true 228 true		3000	users				
				3000	ascis				
91800	1	228 true							

ins with

Page 1

Figure 13: Predicted positions of the trains with 100000 passengers

0.0.8 With no of passengers= 100000 and no of trains=10

Distance	PosnConf	NumUserInput	isPeak	Stations
55	500	1	546 true	MumbaiCentral
56	500	1	546 true	
57	700	1	546 true	
58	300	1	546 true	
59	900	1	546 true	
60	000	1	546 true	
61	100	1	546 true	
62	200	1	546 true	
114	100	1	689 true	Dadar
115	500	1	689 true	
116		1	689 true	
117		1	689 true	
118		1	689 true	
119		1	689 true	
120		1	689 true	
121		1	689 true	
173		1	857 true	Khar Road
174		1	857 true	
175		1	857 true	
176		1	857 true	
177		1	857 true	
178		1	857 true	
179		1	857 true	
180		1	857 true	
228		1	38092 true	
229		1	38092 true 38092 true	
230 231		1	38092 true	
231		1	38092 true	
232		1	38092 true	
234		1	38092 true	
235		1	38092 true	Jogeshwari
236		1	38092 true	305031111
237		1	38092 true	
238		1	38092 true	
239		1	38092 true	
240		1	38092 true	
241	100	1	38092 true	
242	200	1	38092 true	
243	000	1	38092 true	
837	700	1	8291 true	KelveRoad
843	800	1	8291 true	KelveRoad
844	100	1	8291 true	
845	500	1	8291 true	
846	500	1	8291 true	
852	200	1	8291 true	
904	100	1	228 true	Paighra
910	000	1	228 true	Palghra
911	100	1	228 true	
912	200	1	228 true	
913	800	1	228 true	
919		1	228 true	Umroli-Boisar
978		1	80 true	Umroli-Boisar
979	900	1	80 true	

Figure 15: Predicted positions of the trains with 100000 passengers

0.0.9 With no of passengers= 500000 and no of trains=10

Distance	PosnConf	NumUserInput	isPeak	Stations
55	00	1	2714 true	MumbaiCentral
56		1	2714 true	
570		1	2714 true	
58		1	2714 true	
59		1	2714 true 2714 true	
61		1	2714 true	
62		1	2714 true	
114		1	3506 true	Dadar
115		1	3506 true	
116	00	1	3506 true	
117	00	1	3506 true	
118	00	1	3506 true	
119	00	1	3506 true	
120		1	3506 true	
121		1	3506 true	
173		1	4407 true	Khar Road
174		1	4407 true	
1750 1760		1	4407 true 4407 true	
177		1	4407 true	
178		1	4407 true	
179		1	4407 true	
180		1	4407 true	
228	00	1	191220 true	
229	00	1	191220 true	
230	00	1	191220 true	
231		1	191220 true	
232		1	191220 true	
233		1	191220 true	
234		1	191220 true	
235		1	191220 true 191220 true	Jogeshwari
237		1	191220 true	
238		1	191220 true	
239		1	191220 true	
240		1	191220 true	
241	00	1	191220 true	
242	00	1	191220 true	
243	00	1	191220 true	
837		1	41745 true	KelveRoad
843		1	41745 true	KelveRoad
844		1	41745 true	
845		1	41745 true	
846 852		1	41745 true 41745 true	Palghar
904		1	1036 true	Palghar
910		1	1036 true	
9110		1	1036 true	
912	00	1	1036 true	
913	00	1	1036 true	
919	00	1	1036 true	
971		1	459 true	Umroli-Boisar
977		1	459 true	Umroli-Boisar
978		1	459 true	
979		1	459 true	
980		1	459 true	
986	00	1	459 true	Umro1i-Boisar

Figure 16: Predicted positions of the trains with 500000 passengers