	A	B	C	D	E	F	G	H	I	J	K	L
1	Income distribution of 1000 families follows Normal distribution with Mean 40000 and S.D. 10000. From this group one family is											
2	selected at random, compute the probability that income of this family lies.											
3		i) below 45000 ii) more than 42000 iii) between 45000 to 50000										
4	Also estimate the number of families whose income lies											
5		i) atleast 46000 ii) atmost 50000 iii) between 35000 to 50000										
6												
7	Solution:- Let, x=Income											
8	Here, we have											
9		Mean(μ)=	40000	S.D(σ)=	10000	N=	10000					
10	First Part											
11	i) Req.prob. =p(x<45000)				0.69146246	NORM.DIST(45000,C9,E9,1)						
12	ii) Req.prob. =p(x>42000)				0.42074029	1-NORM.DIST(42000,C9,E9,1)						
13	iii) Req.prob =p(45000<x<50000)				0.14988228	NORM.DIST(50000,C9,E9,1)-NORM.DIST(45000,C9,E9,1)						
14												
15	Second Part											
16	i) Req.prob. =N*p(x>=46000)				2743	G9*(1-NORM.DIST(46000,C9,E9,1))						
17	ii) Req.prob. =N*p(x<=50000)				8413	G9*NORM.DIST(50000,C9,E9,1)						
18	iii) Req.prob. =N*p(35000<x<50000)				5328	G9*(NORM.DIST(50000,C9,E9,1)-NORM.DIST(35000,C9,E9,1))						
19												
20												
21						Name	Karina Kc					
22						Roll NO:	16					

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	A	B	C	D	E	F	G	H	I
1	fit Poisson distribution to following data.								
2	No. of Accidents:-		0	1	2	3	4	5	6
3	Noo. Of Days:-		195	91	40	20	10	3	1
4									
5	Table for expected frequencies								
6	x	f	f*x	E					
7	0	195	0	160	Here, mean(μ)=		0.811	C14/B14	
8	1	91	91	130		N=	360		
9	2	40	80	53		E=	G$9*POISSON(A8,G$8,0)		
10	3	20	60	14					
11	4	10	40	3					
12	5	3	15	0					
13	6	1	6	0					
14		360	292	360					
15									
16						Name: Karina kc			
17						Roll No: 16			

	A	B	C	D	E	F	G	H	I
1	Fit binomial distritution to given data.								
2	No. of girls:-		0	1	2	3	4		
3	No. of families:-		20	112	244	115	21		
4									
5	Solution:-	Let x= Number of girls							
6	Here,we have								
7		n=	4	p=	0.5	N=	512		
8	Calculation table of expected frequencies								
9		x=r	x=r	x=r	x=r				
10		0	20	0.0625	32	Where,O=observed frequency			
11		1	112	0.25	128	E=Expected frequency			
12		2	244	0.375	192				
13		3	115	0.25	128				
14		4	21	0.0625	32				
15			512	1	512				
16			P(x=r)=	BINOMDIST(B10,C$7,E$7,0)					
17			E=	G$7*D11					
18									
19						Name= Karina Kc			
20						Roll NO: 16			

	A	B	C	D	E	F	G	H	I	J	K	L
1	Income distribution of 1000 families follows Normal distribution with Mean 40000 and S.D. 10000. From this group one family is											
2	selected at random, compute the probability that income of this family lies.											
3		i) below 45000 ii) more than 42000 iii) between 45000 to 50000										
4	Also estimate the number of families whose income lies											
5		i) atleast 46000 ii) atmost 50000 iii) between 35000 to 50000										
6												
7	Solution:- Let, x=Income											
8	Here, we have											
9		Mean(μ)=	40000	S.D(σ)=	10000	N=	10000					
10	First Part											
11	i) Req.prob. =p(x<45000)				0.69146246	NORM.DIST(45000,C9,E9,1)						
12	ii) Req.prob. =p(x>42000)				0.42074029	1-NORM.DIST(42000,C9,E9,1)						
13	iii) Req.prob =p(45000<x<50000)				0.14988228	NORM.DIST(50000,C9,E9,1)-NORM.DIST(45000,C9,E9,1)						
14												
15	Second Part											
16	i) Req.prob. =N*p(x>=46000)				2743	G9*(1-NORM.DIST(46000,C9,E9,1))						
17	ii) Req.prob. =N*p(x<=50000)				8413	G9*NORM.DIST(50000,C9,E9,1)						
18	iii) Req.prob. =N*p(35000<x<50000)				5328	G9*(NORM.DIST(50000,C9,E9,1)-NORM.DIST(35000,C9,E9,1))						
19												
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21						Name	Koyal Kc					
22						Roll NO:	16					

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	A	B	C	D	E	F	G	H	I
1	fit Poisson distribution to following data.								
2	No. of Accidents:-		0	1	2	3	4	5	6
3	Noo. Of Days:-		195	91	40	20	10	3	1
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5	Table for expected frequencies								
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10	3	20	60	14					
11	4	10	40	3					
12	5	3	15	0					
13	6	1	6	0					
14		360	292	360					
15									
16						Name: Koyal kc			
17						Roll No: 16			

	A	B	C	D	E	F	G	H	I
1	Fit binomial distritution to given data.								
2	No. of girls:-		0	1	2	3	4		
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15			512	1	512				
16			P(x=r)=	BINOMDIST(B10,C$7,E$7,0)					
17			E=	G$7*D11					
18									
19						Name= Koyal Kc			
20						Roll NO: 16			