

7. Hypotheses about Mean and Proportion of two populations

Task 1.

Task 1	Ending wei	Weight change		Ending weight	Weight change
C58/J	21.1	0.977			
C58/J	21.1	1.066	p-val	4.12583E-14	0.105225536
C58/J	19.2	1.129			
C58/J	21.4	1.23	if assume s1 = s2 :		
C58/J	20	0.93	p-val	7.00677E-17	0.122259522
C58/J	24	1.148			
C58/J	21.4	1.189			

Task 2.

TASK 7.2	
Starting age	0.165799
Ending age	0.223033
Starting weight	5.48E-34
Ending weight	8.98E-38
Weight change	0.001405
Bleeding time	0.248716
Ionized Ca in blood	0.271336
Blood pH	0.009593
Bone mineral density	2.41E-05
Lean tissues weight	4.66E-33
Fat weight	2.28E-21

Task 3.

TASK 7.3	soybean	sunflower	casein	sunflower/soyabean	sunflower/casein
	243	423	368	0.007588294	0.819701889
	230	340	390	significant	not significant
	248	392	379		
	327	339	260	As there is no linkage b/w observations we use UNPAIRED ttest	
	329	341	404		
	250	226	318		
	193	320	352		
	271	295	359		
	316	334	216		
	267	322	222		

Task 4.

TASK 7.4				
			Same patients in both samples => PAIRED	
Person	Penicillin	Amoxicillin		
1	42	36	p-value=	0.479767
2	34	44		
3	57	61	Not significant	
4	40	35		
5	28	35		
6	48	50		

Task 5.

TASK 7.5					
before	after				
2	5	p-value=	0.022047		
1	2				
7	6	We can reject null hypothesis			
7	7				

Task 6.

TASK 7.6				
Gender	Beer		Male	Female
Female	Dark	n=	80	70
Female	Dark	dark beer	20	10
Female	Dark	p=	0.25	0.14285714
Female	Dark	pooled p=	0.2	
Female	Dark	s_p=	0.065465367	
Female	Dark	z=	1.636634177	
Female	Dark	p-value=	0.10170693	
Female	Dark			
Female	Dark	Not significant		
Female	Dark	We cannot reject null hypothesis		

Task 7.

TASK 7.7			
	men	women	
n	505	496	
p	0.16	0.25	
pooled p	0.204595		
z	-3.52915		
p-value	0.000417		

Task 8.

TASK 7.8			
	Cancer	Conrol	
n	61	238	
shipbuild	11	35	
p	0.180328	0.147059	
pooled p	0.153846		
z	0.642525		
pval	0.520532		