High level test plan

ID	DESCRIPTION	Expected output	Actual output
HR01	Performing arithmetic operations	Success	Success
HR02	Performing trigonometric operations	Success	Success
HR03	Performing logarithmic operations	Success	Success
HR04	Performing exponential operations	Success	Success
HR05	Finding the factorial of a number	Success	Success
HR06	Performing other frequent operations	Success	Success

Low level test plan

TEST ID	HL_ID	DESCRIPTION	USER INPUT	EXP. OUTPUT	ACTUAL OUTPUT
LR_01	HR01	Performing the **addition** operation	[50,10]	60	60
LR_02	HR01	Performing the **addition** operation	[4.2,2.1]	6.3	6.3
LR_03	HR01	Performing the **addition** operation	[55,-5]	50	50
LR_04	HR01	Performing the **addition** operation	[12.5,-2.5]	10.0	10.0
LR_05	HR01	Performing the **subtraction** operation	[50,10]	40	40
LR_06	HR01	Performing the **subtraction** operation	[4.2,2.1]	2.1	2.1
LR_07	HR01	Performing the **subtraction** operation	[55,-5]	60	60
LR_08	HR01	Performing the **subtraction** operation	[12.5,-2.5]	15	15
LR_09	HR01	Performing the **multiplication** operation	[50,10]	500	500
LR_10	HR01	Performing the **multiplication** operation	[4.2,2.1]	8.82	8.82
LR_11	HR01	Performing the **multiplication** operation	[55,-5]	-275	-275
LR_12	HR01	Performing the **multiplication** operation	[12.5,-2.5]	-31.25	-31.25
LR_13	HR01	Performing the **division** operation	[50,10]	5	5
LR_14	HR01	Performing the **division** operation	[4.2,2.1]	2.0	2.0
LR_15	HR01	Performing the **division** operation	[55,-5]	-11	-11
LR_16	HR01	Performing the **division** operation	[12.5,-2.5]	-5.0	-5.0
LR_17	HR02	Performing **sin** operation	30	0.5	0.5
LR_18	HR02	Performing **sin** operation	-60	- 0.87	- 0.87
LR_19	HR02	Performing **sin** operation	90	1	1
LR_20	HR02	Performing **cos** operation	30	0.87	0.87
LR_21	HR02	Performing **cos** operation	-60	0.5	0.5
LR_22	HR02	Performing **cos** operation	90	0	0
LR_23	HR02	Performing **tan** operation	30	0.58	0.58
LR_24	HR02	Performing **tan** operation	-60	-1.73	-1.73
LR_25	HR02	Performing **tan** operation	90	UNDEFINED	UNDEFINED
LR_26	HR02	Performing **cot** operation	30	1.73	1.73
LR_27	HR02	Performing **cot** operation	45	1	1
LR_28	HR02	Performing **cot** operation	0	UNDEFINED	UNDEFINED
LR_29	HR02	Performing **cosec** operation	30	2	2
LR_30	HR02	Performing **cosec** operation	0	UNDEFINED	UNDEFINED
LR_31	HR02	Performing **cosec** operation	45	1.414	1.414
LR_32	HR02	Performing **sec** operation	90	UNDEFINED	UNDEFINED
LR_33	HR02	Performing **sec** operation	30	1.15	1.15
LR_34	HR02	Performing **sec** operation	0	1	1
LR_35	HR03	Performing **natural log** operation	10	2.30	2.30
LR_36	HR03	Performing **natural log** operation	-5	UNDEFINED	UNDEFINED
LR_37	HR03	Performing **logarithimic(base 10)** operation	2	0.3	0.3

LR_38	HR03	Performing **logarithimic(base 10)** operation	-2	UNDEFINED	UNDEFINED
LR_39	HR04	Performing **exponential** operation	2	7.39	7.39
LR_40	HR05	Performing **factorial** operation	0	1	1
LR_41	HR05	Performing **factorial** operation	4	24	24
LR_40	HR06	Performing **square** operation	2	4	4
LR_41	HR06	Performing **Xth power of 10** operation	2.3	199.53	199.53
LR_42	HR06	Performing **Nth square of** operation	[3,4]	81	81
LR_43	HR06	Performing **square root** operation	16	4.0	4.0
LR_44	HR06	Performing **square root** operation	-25	UNDEFINED	UNDEFINED