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EXPERIMENT NO:	1

AIM:	**To implement the various functions e.g. linear, non-linear, quadratic, exponential etc.** **The input (i.e. n) to all the above functions varies from 0 to 100 with increment of 1. Then add the function n! in the** **list and execute the same for n from 0 to 20.**

CODE:	C LANGUAGE:
	
	#include <stdio.h>
	#include<math.h>
	
	int main()
	{
	printf("i\tn\tnlogn\t(logn)^2\tln(n)\tlog10(n)\tln(ln(n)\tn^log(logn)
	\t(3/2)^n\tsqrt(ln(n)\tlog(n)^logn\n");
	for(int i=1;i<=100;i++){
	
	printf("%d\t%d\t%0.3f\t%0.3f\t%0.3f\t%0.3f\t%0.3f\t%0.3f\t%0.3f\t%
	0.3f\t%0.3f",i,i,i*log2(i),pow(log(i),2),log(i),log2(i),log(log(i)),pow(i,log2(log
	2(i))),pow(1.5,i),sqrt(log(i)),pow(log2(i),log2(i)));
	printf("\n");
	}
	return 0;
	}

ALGORITHM:	STEP 1: Start STEP 2: Initialize variables STEP 3: for loop from 0 to 100 printing answer to all functions STEP 4: End