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| **NAME** | Harshey Kaur Soi |
| **UID** | 2021300057 |
| **SUBJECT** | DAA |
| **EXPERIMENT NO.** | 1 |
| **CLASS** | SE COMPS-A |
| **BATCH** | D |
| **AIM** | To implement the various functions e.g. linear, non-linear, quadratic, exponential etc. |
| **PROGRAM** | #include <stdio.h> #include <math.h> int main() {     //int i,n=100;     for(int i=0;i<=100;i++)     { printf("Number is : %d and cube of the %d is :%d \n",i,i, (i\*i\*i));         }    for(int i=0;i<=100;i++)     {         printf("The number is: %d\n",i);     }         for(double i=0;i<=100;i++)     {         printf("The value of ln.%f is: %f\n",i,log(i));     }    for(double i=0;i<=100;i++)     {         printf("The value of ln(ln.%f) is: %f\n",i,log(log(i)));     }     for(double i=0;i<=100;i++)     {         printf("The value of %f.2^%f is: %f\n",i,i,i\*pow(2,i));     }      for(double i=0;i<=100;i++)     {         printf("The value of (3/2)^%f is: %f\n",i,pow(1.5,i));     }      for(double i=0;i<=100;i++)     {         printf("The value of 2^2^%f is: %f\n",i,pow(2,pow(2,i)));     }      for(double i=0;i<=100;i++)     {         printf("The value of 2^2^(%f+1) is: %f\n",i,pow(2,pow(2,i+1)));     }      for(double i=0;i<=100;i++)     {         printf("The value of lg.%f is: %f\n",i,log10(i));     }         for(double i=0;i<=100;i++)     {         printf("The value of 2^lg.%f is: %f\n",i,pow(2,log10(i)))     } } |
| **OBSERVATION** |  |
| **CONCLUSION** | By performing the above experiment I understood about the various exponential and logarithmic functions and implemented them in the C programming language. |