Exponential Value

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Value of x | Value of exp(x) | Value obtained from Assembly Code for n=10 | Value obtained from Assembly for n=15 | Value obtained from Assembly code for n=20 | Value obtained from Assembler  For n=25 |  |
| 0 | 1 | 1 | 1 | 1 | 1 | - |
| 1 | 2.72 | 2.7182817 | 2.718282 | 2.71828219 | 2.7182819 | - |
| 2 | 7.39 | 7.388713 | 7.3890567 | 7.3890567 | 7.3890567 | - |
| 3 | 20.09 | 20.063395 | 20.085526 | 20.085539 | 20.085539 | - |
| 5 | 148.41 | 143.68948 | 148.37961 | 148.41313 | 148.4132 | - |
| 6 | 403.43 | 369.5714 | 402.8638 | 403.42664 | 403.4287 | - |
| 8 | 2980.96 | 2136.2268 | 2929.5159 | 2980.2043 | 2980.9548 | - |
| 11 | 59874.14 | 20387.781 | 51135.145 | 59317.934 | 59862.234375 | 59872.176(n=27)  59873.38(n=28)  59873.85(n=29) |
| 12 | 162754.79 | 39450.49 | 125650.695 | 159291.42 | 162643.203125 | 162751.109375(n=29)  162753.34375(n=30) |
| 14 | 1202604.28 | 131564.15625 | 686009.625 | 1110599.125 | 1196567.5 |  |
| 16 | 8886110.52 | 384753.625 | 3265889 | 7217730.5 | 8687813 |  |
| 18 | 65659969.14 | 1009922.4375 | 13662352 | 42739128 | 61177996 |  |
| 20 | 485165195.41 | 2423600.5 | 50876504 | 228152480 | 409104608 |  |

Tan Value

|  |  |  |  |
| --- | --- | --- | --- |
| Value of x in degree | Value of  Tan(x) | Value Obtained from C code using Iterative process For n=10 | Value obtained from Assembly Code  For n=10 |
| 0 | 0 | 0.0 | 0.0 |
| 2 | 0.03492076949 | 0.034921 | 0.03492074 |
| 3 | 0.05240777928 | 0.052408 | 0.052407745 |
| 7 | 0.1227845609 | 0.122785 | 0.122784846 |
| 10 | 0.1763269807 | 0.176329 | 0.17632917 |
| 14 | 0.2493280028 | 0.249341 | 0.24934058 |
| 20 | 0.3639702343 | 0.364051 | 0.3640507 |
| 30 | 0.5773502692 | 0.578063 | 0.5780632 |
| 45 | 1 | 1.007965 | 1.0079652 |
| 55 | 1.428148007 | 1.460924 | 1.4609247 |
| 60 | 1.732050808 | 1.798909 | 1.7989093 |
| 75 | 3.732050808 | 4.603901 | 4.603905 |
| 80 | 5.67128182 | 9.117165 | 9.117185 |

The following online converter is used

<https://www.h-schmidt.net/FloatConverter/IEEE754.html>