Taylor Series

```c
double e(int x, int n)
{
    static double p=1,f=1;
    double r;

    if(n==0)
        return 1;
    r=e(x,n-1);
    p=p*x;
    f=f*n;
    return r+p/f;
}
int main()
{
    printf("%lf \n",e(4,15));
    return 0;
}
```

Taylor Series Horner's Rule

```c
double e(int x, int n)
{
    static double s;
    if(n==0)
        return s;
    s=1+x*s/n;
    return e(x,n-1);

}
int main()
{
    printf("%lf \n",e(2,10));
    return 0;
}
```

Taylor Serie Iterative

```c
#include <stdio.h>
```

```c
double e(int x, int n)
{
    double s=1;
    int i;
    double num=1;
    double den=1;

    for(i=1;i<=n;i++)
    {
        num*=x;
        den*=i;
        s+=num/den;
    }
    return s;
}
int main()
{
    printf("%lf \n",e(1,10));
    return 0;
}
```