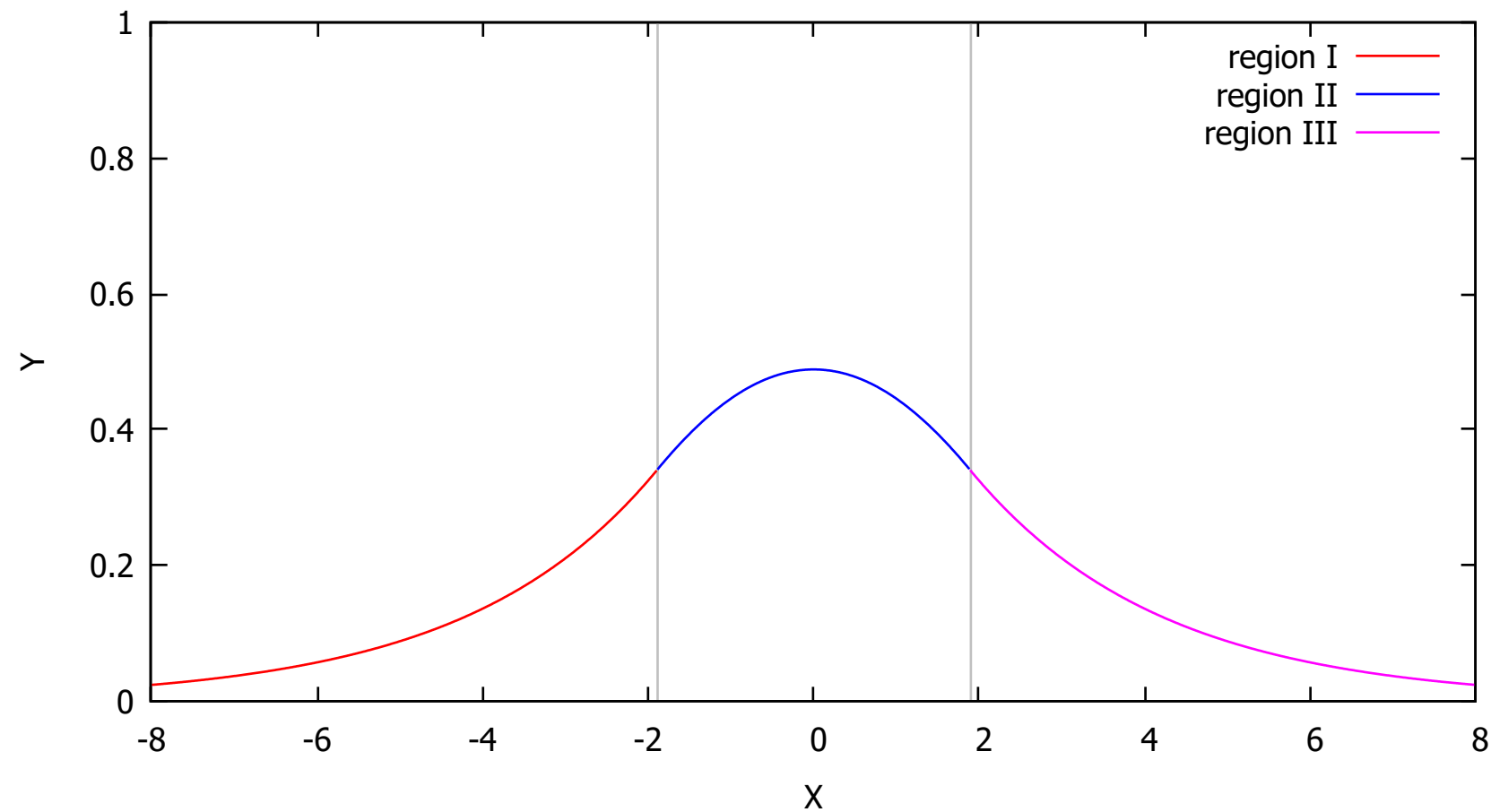


Wavefunction for a particle in finite well(first,even)



```
C:\Users\Debasis\Documents\GitHub\FortranSem1\assignments_lect\finitetwell>gfortran finitetwell.f90
```

```
C:\Users\Debasis\Documents\GitHub\FortranSem1\assignments_lect\finitetwell>a.exe
```

```
Root found in 11 iterations
```

```
a(angstrom)      : 1.000000
```

```
V0(eV)           : 5.000000
```

```
a(au)            : 1.889726
```

```
V0(hartree)      : 0.183747
```

```
lambda           : 1.312342
```

```
Root             : 0.798975
```

```
F(root)          : 0.000010
```

```
Energy(eV)       : 2.567856
```

```
q**2+a**2        : 0.367496
```

```
2*V0             : 0.367493
```

```
C/A              : 1.585078
```

```
C                : 0.774363
```

```
A               : 0.488533
```

```
alpha           : 0.434438
```

```
q               : 0.422799
```

```
C:\Users\Debasis\Documents\GitHub\FortranSem1\assignments_lect\finitetwell>_
```