Software Fault Prediction Analysis Using the Linear Regression Technique

Take Input 10 data And Predict The Next 5 Data.

Relative Error

```
Input = 11 Ex= 24 Pr 23.73 Error= 0.27 in percent Error 1.12 Input = 12 Ex= 27 Pr 25.76 Error= 1.24 in percent Error 4.82 Input = 13 Ex= 36 Pr 27.78 Error= 8.22 in percent Error 29.58 Input = 14 Ex= 39 Pr 29.81 Error= 9.19 in percent Error 30.85 Input = 15 Ex= 41 Pr 31.83 Error= 9.17 in percent Error 28.81 **Average Error for the Next 5 5.61818181818187
```

Take Input 20 data And Predict The Next 10 Data.

Relative Error

```
Input = 21 Ex = 50
                  Pr 54.35
                           Error= 4.35
                                         in percent Error 8.01
Input = 22 Ex = 50
                  Pr 57.02 Error= 7.02
                                         in percent Error 12.31
Input = 23 Ex= 50 Pr 59.69 Error= 9.69
                                         in percent Error 16.23
Input = 24 Ex= 50 Pr 62.35 Error= 12.35
                                          in percent Error 19.81
Input = 25 Ex= 52 Pr 65.02 Error= 13.02
                                          in percent Error 20.02
Input = 26 Ex= 52 Pr 67.69 Error= 15.69
                                          in percent Error 23.18
Input = 27 Ex= 52 Pr 70.35 Error= 18.35
                                          in percent Error 26.09
Input = 28 Ex = 54
                  Pr 73.02 Error= 19.02
                                          in percent Error 26.05
                  Pr 75.69 Error= 18.69
Input = 29 Ex = 57
                                          in percent Error 24.69
                  Pr 78.35 Error= 10.35
Input = 30 Ex = 68
                                          in percent Error 13.22
**Average Error for the Next 10
                                 12.853759398496237
```

Take Input 40 data And Predict The Next 13 Data.

Relative Error

```
Input = 41 Ex= 91
                  Pr 92.79 Error= 1.79
                                         in percent Error 1.93
Input = 42 Ex = 91
                  Pr 95.02 Error= 4.02 in percent Error 4.23
Input = 43 Ex = 92
                  Pr 97.25 Error= 5.25
                                         in percent Error 5.39
Input = 44 Ex = 98
                  Pr 99.47 Error= 1.47 in percent Error 1.48
Input = 45 Ex= 100 Pr 101.70 Error= 1.70
                                           in percent Error 1.67
Input = 46 Ex = 100
                  Pr 103.92 Error= 3.92
                                           in percent Error 3.78
                   Pr 106.15
Input = 47 Ex = 105
                             Error= 1.15
                                           in percent Error 1.08
Input = 48 Ex = 115
                   Pr 108.38 Error= 6.62
                                           in percent Error 6.11
Input = 49 Ex = 118
                   Pr 110.60 Error= 7.40 in percent Error 6.69
                   Pr 112.83 Error= 8.17 in percent Error 7.24
Input = 50 Ex = 121
Input = 51 Ex = 123
                   Pr 115.06 Error= 7.94 in percent Error 6.90
Input = 52 Ex = 124
                   Pr 117.28 Error= 6.72
                                           in percent Error 5.73
                   Pr 119.51 Error= 4.49
Input = 53 Ex = 124
                                           in percent Error 3.76
**Average Error for the Next 13
                                 4.664612498195987
```