**Experiment 6: To implement Langrange’s Interpolation formula.**

PS C:\Users\admin\Documents\Saksham Gupta\MSIT> ./a.exe

Enter the number of set of values of x and y: 4

Enter the value of x0 :0

Enter the value of y0 :2

Enter the value of x1 :1

Enter the value of y1 :3

Enter the value of x2 :2

Enter the value of y2 :12

Enter the value of x3 :5

Enter the value of y3 :147

Enter the value of x for which y to be found out :3

Y for the value 3 is 35

Figure 6.1: Output of the program

**Experiment 7: To implement Newton’s Divided Difference formula.**

PS C:\Users\admin\Documents\Saksham Gupta\MSIT> ./a.exe

Enter the number of set of values of x and y: 4

Enter the value of x0 :1

Enter the value of y0 :14

Enter the value of x1 :2

Enter the value of y1 :15

Enter the value of x2 :4

Enter the value of y2 :5

Enter the value of x3 :6

Enter the value of y3 :9

Enter the value of x for which y to be found out :5

Y for the value 5 is 3

Figure 7.1: Output of the program