AIR UNIVERSITY ISLAMABAD

FACULTY OF COMPUTING &

ARTIFICIAL INTELLIGENCE

DEPARTMENT OF COMPUTER SCIENCE

Assignment: 02

SUBMITTED BY:

> **Name:** Hamza Afzal
>
> **Roll no:** 210948
>
> **Class:** BSCS-V-B

SUBMITTED TO:

> **Instructor:** Junaid Nazar
>
> **Course:** Design & Analysis of Algorithms

Computational Time for Attributes using different sorting algorithms: (unit : milliseconds)

Attribute Name	Insertion Sort (Non-increasing order)	Insertion Sort (Non-decreasing order)	Merge Sort (Non-increasing order)	Merge Sort (Non-decreasing order)
Credit Loan Amount	437354.1	390080.5	352.893	383.092
Credit Score	294801.5	347172.2	341.439	440.077
Annual Income	468213.6	282471.2	351.204	612.035
Monthly Debt	421178.9	263528.2	323.096	348.147
Year of Credit History	658029.2	396057.5	357.845	411.216
Months since last delinquent	304106.6	211708.8	358.006	359.872
Number of Open Accounts	251407.5	262797.4	344.053	350.613
Number of Credit Problems	69873.48	70156.35	238.215	332.456
Credit Card Balance	296793.8	444548.8	364.875	377.074
Maximum Open Credit	295598.1	364218.5	363.456	463.187
Bankruptcies	58437.56	50793.74	243.349	439.24
Tax liens	11373.25	9637.725	240.345	327.206