**DATA STRUCTURE LAB EXERCISES**

**EXPERIMENT-3**

#include <stdio.h>

int main() {

int a[100], b[100], merged[200];

int n1, n2, i, j;

printf("Enter number of elements in first array: ");

scanf("%d", &n1);

printf("Enter elements of first array:\n");

for (i = 0; i < n1; i++) {

scanf("%d", &a[i]);

}

printf("Enter number of elements in second array: ");

scanf("%d", &n2);

printf("Enter elements of second array:\n");

for (i = 0; i < n2; i++) {

scanf("%d", &b[i]);

}

// Merging the arrays

for (i = 0; i < n1; i++) {

merged[i] = a[i];

}

for (j = 0; j < n2; j++) {

merged[i + j] = b[j];

}

printf("Merged array:\n");

for (i = 0; i < n1 + n2; i++) {

printf("%d ", merged[i]);

}

return 0;

}

