**Linear Array Lab Task**

Problem 1:

**#include**<iostream>

*using* *namespace* std;

int main(){

    int *a*[5] = {3,4,5,1,2};

        int *b*[3] = {8,3,9};

        int *c*[sizeof(*a*)+sizeof(*b*)];

**for**(int *i*=0;*i*<5;*i*++){

*c*[*i*] = *a*[*i*];

        }

**for**(int *i*=5,*j*=0;*i*<8,*j*<3;*i*++,*j*++){

*c*[*i*] = *b*[*j*];

        }

*cout*<<"\nMerged Array : ";

**for**(int *i*=0;*i*<8;*i*++){

*cout*<<" "<<*c*[*i*];

        }

}

A number on a black background

Description automatically generated

Problem 4:

**#include**<iostream>

*using* *namespace* std;

int main() {

    int *a*[10] = {3,4,2,1,2,6,2,2,9};

*cout*<<"\nEnter the element to search : ";

int *n*,*c*=0;*cin*>>*n*;

**for**(int *i*=0;*i*<10;*i*++){

**if**(*a*[*i*] == *n*) {

*c*++;

    }

}

*cout*<<"The number occurs "<<*c*<<" times"<<endl;

}

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Problem 5:

**#include** <iostream>

*using* *namespace* std;

int main() {

    int *a*[10] = {8,4,6,1,6,9,6,1,9,8},*n* = 10, *a2*[10] = {0,0,0,0,0,0,0,0,0,0};

**for** (int *i* = 0; *i* < *n*; *i*++) {

**if** (*a2*[*i*]) **continue**;

        int *count* = 1;

**for** (int *j* = *i* + 1; *j* < *n*; *j*++) {

**if** (*a*[*i*] == *a*[*j*]) {

*count*++;

*a2*[*j*] = 1;

            }

        }

*cout*<<*a*[*i*]<<" occurs "<<*count*<<" times"<<endl;

    }

}

A screenshot of a computer screen

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