Task 1

#include <iostream>

using namespace std;

int main()

{

int num[10];

int a = 0;

int repeat = 0;

int highest = 0;

int mostRepeated = 0;

cout << "Enter 10 numbers\n";

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

{

cin >> num[i];

}

for (int j = 0; j < 10; j++){

a = num[j];

repeat = 0;

for (int k = 0; k < 10; k++){

if (num[k] == a){

repeat += 1;

if (repeat > highest){

highest = repeat;

mostRepeated = a;

}

}

}

}

cout << "The most repeated number is " << mostRepeated;

return 0;

}

Task 2

#include <iostream>

using namespace std;

int main()

{

int a[8] = {13,15,17,9,99,77,65,43};

int smallest=a[0];

int largest = a[0];

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

{

if (a[i] < smallest){

smallest = a[i];

}

if (a[i] > largest){

largest = a[i];

}

}

cout << "The largest number in the array is " << largest << " and the smallest number is " << smallest;

return 0;

}

Task 3

#include <iostream>

using namespace std;

int main()

{

cout << "Enter a array of five integers\n";

int num[5];

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

{

cin >> num[i];

}

int temp = 0;

temp = num[2];

num[2] = num[4];

num[4] = temp;

cout << "The resultant array after swapping is:\n";

for (int j = 0; j < 5; j++)

{

cout << num[j] << endl;

}

return 0;

}