FUNDAMENTALS OF PROGRAMMING(LAB)

By

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HOME TASK

Q1.

```cpp
#include <iostream>

using namespace std;

int main()

{

int num[10];

int val = 0;

int repeat = 0;

int highest = 0;

int mostRepeated = 0;

cout << "Enter 10 numbers\n";

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

{

cin >> num[a];

}

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

{

val = num[b];

repeat = 0;

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

{

if (num[k] == val)

{

repeat += 1;

if (repeat > highest)

{

highest = repeat;

mostRepeated = val;

}

}

}
```
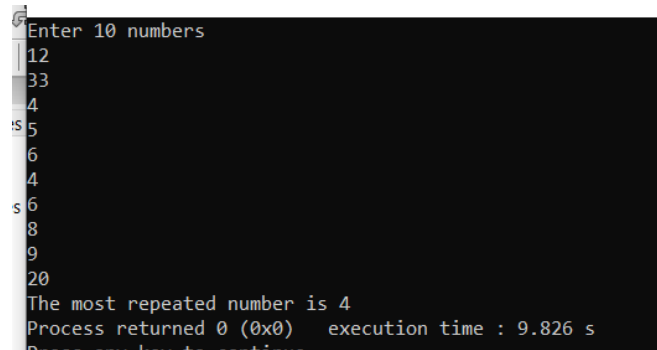
```
      }

   }

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

return 0;

}
```



```
Enter 10 numbers
12
33
4
5
6
4
6
8
9
20
The most repeated number is 4
Process returned 0 (0x0)   execution time : 9.826 s
```

Q2.

```cpp
#include <iostream>

using namespace std;

int main()

{

int a[8] = {13,19,1,9,234,72,65,3};

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;

}
```

```
The largest number in the array is 234 and the smallest number is 1
Process returned 0 (0x0)    execution time : 0.085 s
Press any key to continue.
```

Q3.

```
#include <iostream>

using namespace std;

int main()

{

cout << "Array of five integers\n";

int num[5];

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

{

cin >> num[a];

}

int temp = 0;

temp = num[2];

num[2] = num[4];

num[4] = temp;

cout << "After swapping"<<endl;

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

{

cout << num[b] << endl;

}

return 0;

}
```

```
Array of five integers
12
13
14
15
16
After swapping
12
13
16
15
14

Process returned 0 (0x0)   execution time :
Press any key to continue.
```