**SVKM’s NMIMS**

**Mukesh Patel School of Technology Management and Engineering, Mumbai**

**Department of Electronics & Telecommunication**



**Programming for Problem Solving (Exp 6 - 2)**

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| **Roll No: J001** | **Name: Adith Ramakrishna** |
| **Program: B. Tech Data Science (1st)** | **Batch: J1** |
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**Task 1:**

#include <iostream>

using namespace std;

int main() {

int size\_array;

cout << "Enter the number of elements: ";

cin >> size\_array;

int elements[size\_array];

cout << endl;

for(int i; i < size\_array; i++) {

cout << "\nEnter the value (" << i+1 << "): ";

cin >> elements[i];

}

int max\_val = elements[0], min\_val = elements[0];

for(int i; i < size\_array; i++) {

if(max\_val < elements[i]) {

max\_val = elements[i];

}

if(min\_val > elements[i]) {

min\_val = elements[i];

}

}

cout << "\n\nMaximum Value: " << max\_val << "\nMinimum Value: " << min\_val << "\n";

return 0;

}

**Task 2:**

#include <iostream>

using namespace std;

int main() {

int a[10], n, i;

cout << "Enter a number: ";

cin >> n;

for (i = 0; n > 0; i++) {

a[i] = n % 2;

n = n / 2;

}

cout << "\n\nBinary of the given number: ";

for (i = i - 1; i >= 0; i--) {

cout << a[i];

}

cout << "\n";

}

**Task 3:**

#include <iostream>

using namespace std;

int main() {

int size\_array, j;

cout << "Enter the number of elements: ";

cin >> size\_array;

int old\_arr[size\_array], new\_arr[size\_array];

cout << endl;

for(int x = 0; x < size\_array; x++) {

cout << "\nEnter the value (" << x+1 << "): ";

cin >> old\_arr[x];

}

for(int x = 0; x < size\_array; x++) {

if(old\_arr[x] % 2 == 0) {

new\_arr[j++] = old\_arr[x];

}

}

for(int x = 0; x < size\_array; x++) {

if(old\_arr[x] % 2 != 0) {

new\_arr[j++] = old\_arr[x];

}

}

cout << "\n\nOld Array:";

for(int x = 0; x < size\_array; x++) {

cout << "\t" << old\_arr[x];

}

cout << "\n\nNew Array:";

for(int x = 0; x < size\_array; x++) {

cout << "\t" << new\_arr[x];

cout << "\n";

return 0;

}

**Homework Questions:**

**1:**

Array Index cannot be negative and always starts from zero.

**2:**

#include <iostream>

using namespace std;

int main() {

int size\_array;

cout << "Enter the number of elements: ";

cin >> size\_array;

int elements[size\_array];

cout << endl;

for(int i; i < size\_array; i++) {

cout << "\nEnter the value (" << i+1 << "): ";

cin >> elements[i];

}

int el\_search, no\_count, index;

cout << "\n\nEnter the element to be searched: ";

cin >> el\_search;

bool found;

for(int i; i < size\_array; i++) {

if(el\_search == elements[i]) {

found = true;

index = i;

no\_count++;

}

}

if(found) {

cout << "\n\nElement found! (At Index:" << index << ")\nNumber of times: " << no\_count << "\n";

}

else {

cout << "\n\nElement not found!\n";

}

return 0;

}