



MZUMBE UNIVERSITY

FACULTY OF SCIENCE AND TECHNOLOGY (FST)

NAME : ISAKA Z MABAGALA

REG. NO : 13211408/T.18

PROGRAMME : DIT

SUBJECT NAME : INTRODUCTION TO HIGHER LEVEL PROGRAMMING

COURSE CODE : ICT 051

NATURE OF TASK : INDIVIDUAL ASSIGNMENT

LECTURER : MR E. WAMBURA

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SOURCE CODE

```
#include <stdio.h>
```

```
int main(){
```

```
    float balance[5] = { 1000.0, 2.0, 3.4, 7.0, 50.0};
```

```
    float sum = 0, max = balance[0], min = balance[0], range, diff, avr;
```

```
    int n = 0;
```

```
    do{
```

```
        sum += balance[n];
```

```
        if(max < balance[n])
```

```
            max = balance[n];
```

```
        if(min > balance[n])
```

```
            min = balance[n];
```

```
        n++;
```

```
    }while(n < 5);
```

```
    diff = (max - min);
```

```
    range = (max - min);
```

```
    avr = (sum / 5);
```

```
    printf("\n The Sum of all elements in array = %.1f \n", sum);
```

```
    printf("\n The Maximum number of elements in array = %.1f \n", max);
```

```
    printf("\n The minimum number of elements in array = %.1f \n", min);
```

```
    printf("\n The difference between Maximum and minimum number of elements in array =  
%.1f \n", diff);
```

```
    printf("\n The range of elements in array = %.1f \n", range);
```

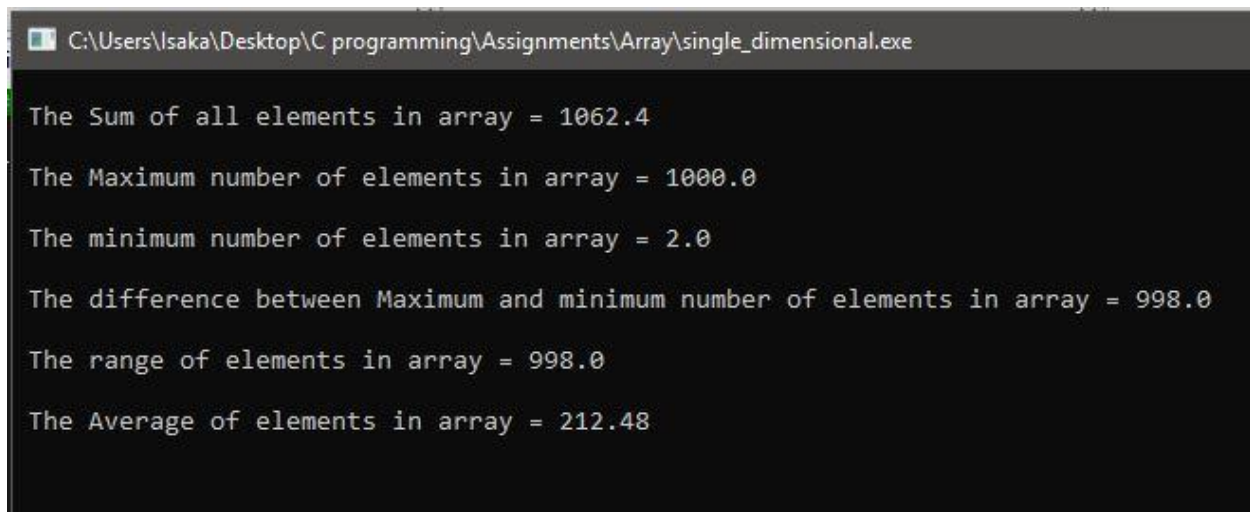
```
    printf("\n The Average of elements in array = %.2f \n", avr);
```

```
    getch();
```

```
    return 0;
```

```
}
```

OUTPUT



```
C:\Users\Isaka\Desktop\C programming\Assignments\Array\single_dimensional.exe

The Sum of all elements in array = 1062.4
The Maximum number of elements in array = 1000.0
The minimum number of elements in array = 2.0
The difference between Maximum and minimum number of elements in array = 998.0
The range of elements in array = 998.0
The Average of elements in array = 212.48
```

The screenshot shows a Windows command prompt window with a dark background. The title bar at the top reads "C:\Users\Isaka\Desktop\C programming\Assignments\Array\single_dimensional.exe". The command prompt displays the output of a C program, which consists of six lines of text. Each line starts with a descriptive label followed by an equals sign and a numerical value. The values are: 1062.4 for the sum, 1000.0 for the maximum number of elements, 2.0 for the minimum number of elements, 998.0 for the difference between maximum and minimum, 998.0 for the range, and 212.48 for the average.