

Assignment #1

```

#include<stdio.h>
#include<math.h>

//The function to check the elements in the array is Prime Or not
int isPrime(int num)
{
    //i is the loop count and flag is used to flag even and odd number
    int i;
    int flag=0;
    //for loop used to check each element by element is that prime or not
    for(int i=2;i<=num/2;i++)
    {
        if(num%i==0)
        {
            flag=1;
            break;
        }
    }
    if(flag==1)
    {
        return 0;
    }
    else{
        return 1;
    }
}

//A function to find the maximum and minimum element of the array parameters are an array and length of the array
int getMaxAndMin(int arr[], int n){
    //Intialing min and max with first element of the array
    int min=arr[0],max=arr[0];
    //Looping through each element
    for (int i=0; i<n; i++){
        // If the element value is greater max assigning the new value
        if (arr[i] > max)

            max = arr[i];
        // If the element value is less than min assigning the new value
        else if(arr[i] < min)
            min = arr[i];
    }

    printf(" Min %d",min);
    printf(" Max %d",max);
}

```

Quincy 2005 - [Assignment2]

File Edit View Project Debug Tools Window Help

File Edit View Project Debug Tools Window Help

```

int main()
{
    //loop is the loop counter and sum is used to store the sum of the elements
    int loop,sum=0;

    //double storage is used to store the average of the elements
    double average=0;

    //declaring array with prime and not prime numbers
    int arr[10]={78,29,11,74,27,96,47,43,64,50};

    //calculate length of the array
    int len = sizeof(arr)/sizeof(arr[0]);

    //Print the heading of each column
    printf("Sr.\t""Number\t""Prime\t""Odd/Even\t""Min/Max \n");

    for(loop=0; loop<len; loop++)
    {
        printf("%d",loop+1);
        printf("\t%d",arr[loop]);

        //Here the isPrime function is called
        printf((isPrime(arr[loop]))?"\tYes":"\tNo");

        //Using if-else selection statement to find even and odd numbers
        if(arr[loop]%2 ==0){
            printf("\tEven\n");
        }
        else{printf("\tOdd\n");}

        //Adding each element to the sum variable when it loop each time
        sum=sum+arr[loop];
        //Mathematical operation to find average
        average=(double)sum/len;
    }

    printf("\n");

    printf("Sum:%d \n",sum);
    printf("average %f \n",average);

    //Calling getMaxAndMin function to get the maximum and element of the defined array
    getMaxAndMin (arr,len);

    return 0;
}

```

```
Quincy 2005
Sr. Number Prime Odd/Even Min/Max
1 78 No Even
2 29 Yes Odd
3 11 Yes Odd
4 74 No Even
5 27 No Odd
6 96 No Even
7 47 Yes Odd
8 43 Yes Odd
9 64 No Even
10 58 No Even

Sum:519
average 51.900000
Min: 11 Max: 96
Press Enter to return to Quincy...
```