**SET A**

PRIME NUMBER IDENTIFICATION

Write a C program that takes number of elements from the user and value of each element in (main function). Store the elements in an array (A). a. Create a function(F1) that takes pointer to the array A and number of elements as parameter. b. In the function, identify the prime numbers in the array (A) and store it in a new array (B) and display the elements of the new array B. IN FUNCTION: In function, every element in the array must be accessed using a pointer only. Do not access the elements of the array using index i.e. using square brackets

**PROGRAM:**

#include <stdio.h>

void prime(int \*p, int n)

{

int arr2[n],i,j,t,k=0;

for(i=0;i<n;i++)

{

t=0;

if(\*(p+i)!=1)

{

for(j=2;j<(\*(p+i))/2;j++)

{

if(\*(p+i)%j==0)

{

t=1;

break;

}

}

if(t==0)

{

\*(arr2+k)=\*(p+i);

k++;

}

}

}

\*(arr2+k)=0;

printf("\nThe prime numbers are listed below\n\n");

for(i=0;\*(arr2+i)!=0;i++)

printf("%d\n",\*(arr2+i));

}

int main()

{

int n,i;

printf("Enter the number of elements\n");

scanf("%d",&n);

int arr1[n];

int \*ptr=arr1;

for(i=0;i<n;i++)

{

printf("Enter the element %d ",i+1);

scanf("%d",ptr+i);

}

prime(ptr,n);

return 0;

}

**LINK TO CODE:** https://onlinegdb.com/Sf9c9GVwp

**SCREENSHOT OF THE CODE:**

Text

Description automatically generated

**OUTPUT:**

Text

Description automatically generatedText

Description automatically generated

**HAND WRITTEN CODE:**

Text, letter

Description automatically generated

Text, letter

Description automatically generated