

PROGRAM 1

```
// Program to add array elements
#include <stdio.h>

int main(){
int a[100],n;

//Taking input of array
printf("Enter Size of array 1\n");
scanf("%d",&n);
printf("Enter %d Elements \n",n);
for(int i=0 ; i<n ; i++){
scanf("%d",&a[i]);
}

//Printing arrays
printf("\n Array :t");
for(int i=0 ; i<n ; i++){
printf("%d ",a[i]);
}
return 0;
}
```

The screenshot shows the Visual Studio Code editor with a C program open in the 'array.c' file. The program is a simple array input and output utility. The terminal window at the bottom shows the execution of the program, including the compilation command 'cc array.c' and the execution command './a.out'. The output shows the user entering the size of the array as 1 and then 4 elements: 50, 60, 3, and 4.

```
Visual Studio Code
Thu Nov 9 10:31 AM
Mist, 24 °C
74 %

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DS_ISE_2023
EXPLORER
  .vscode
  Assignment
    Lecture 1
    Lecture 2
      a.out
      add two array.c
      C array.c
      Assignment 2.txt
      odd even in array.c
  Structure
  Union
  .gitignore

C Struct.c C array.c C Struct pointer.c
Assignment > Lecture 2 > C array.c > ...
1 // Program to add array elements
2 #include <stdio.h>
3
4 int main(){
5     int a[100],n;
6
7     //Taking input of array
8     printf("Enter Size of array 1\n");
9     scanf("%d",&n);
10    printf("Enter %d Elements \n",n);
11    for(int i=0 ; i<n ; i++){
12        scanf("%d",&a[i]);
13    }
14
15    //Printing arrays
16
17    printf("\n Array :t");
18    for(int i=0 ; i<n ; i++){
19        printf("%d ",a[i]);
20    }
21    return 0;
22 }

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
bash - Lecture 2
[suvanbanerjee@elitebook-830-g5 DS_ISE_2023]$ ls
Assignment Structure Union
[suvanbanerjee@elitebook-830-g5 DS_ISE_2023]$ cd Assignment/Lecture\ 2/
[suvanbanerjee@elitebook-830-g5 Lecture 2]$ cc array.c
[suvanbanerjee@elitebook-830-g5 Lecture 2]$ ./a.out
Enter Size of array 1
4
Enter 4 Elements
50 60 3 4
o Array :      50 60 3 4 [suvanbanerjee@elitebook-830-g5 Lecture 2]$
```

PROGRAM 2

```
// Program to add two array
#include <stdio.h>

int main(){
int a[50],b[50],c[100],n,m,l=0;

//Taking input of 1st array
printf("Enter Size of array 1\n");
scanf("%d",&n);
printf("Enter %d Elements \n",n);
for(int i=0 ; i<n ; i++){
scanf("%d",&a[i]);
}

//Taking input of 2nd array
printf("Enter Size of array 2\n");
scanf("%d",&m);
printf("Enter %d Elements \n",m);
for(int i=0 ; i<m ; i++){
scanf("%d",&b[i]);
}

//Copying to array 3

for(int k=0;k<n;k++){
c[l++]=a[k];
}
for(int k=0;k<m;k++){
c[l++]=b[k];
}

//Printing all 3 arrays
printf("\n Array 1:\t");
for(int i=0 ; i<n ; i++){
printf("%d ",a[i]);
}
printf("\n Array 2:\t");
for(int i=0 ; i<m ; i++){
printf("%d ",b[i]);
}
printf("\n Array 3:\t");
for(int i=0 ; i<n+m ; i++){
printf("%d ",c[i]);
}

return 0;
}
```

Visual Studio Code Thu Nov 9 10:33 AM Mist, 24 °C 76 %

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EXPLORER

- DS_ISE_2023
 - .vscode
 - Assignment
 - Lecture 1
 - Lecture 2
 - a.out
 - add two array.c
 - array.c
 - Assignment 2.txt
 - odd even in array.c
 - Structure
 - Union
 - .gitignore
- OUTLINE
- TIMELINE

add two array.c

```
1 // Program to add two array
2 #include <stdio.h>
3
4 int main(){
5     int a[50],b[50],c[100],n,m,l=0;
6
7     //Taking input of 1st array
8     printf("Enter Size of array 1\n");
9     scanf("%d",&n);
10    printf("Enter %d Elements \n",n);
11    for(int i=0 : i<n : i++){
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

bash - Lecture 2

```
[suvanbanerjee@elitebook-830-g5 Lecture 2]$ ./a.out
Enter Size of array 1
3
Enter 3 Elements
1 2 3
Enter Size of array 2
2
Enter 2 Elements
9 8

Array 1:      1 2 3
Array 2:      9 8
Array 3:      1 2 3 9 8 [suvanbanerjee@elitebook-830-g5 Lecture 2]$
```

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PROGRAM 3

```
// Program to add odd and even in an array
#include <stdio.h>

int main(){
int a[100],n,odd=0,even=0;

//Taking input of array
printf("Enter Size of array 1\n");
scanf("%d",&n);
printf("Enter %d Elements \n",n);
for(int i=0 ; i<n ; i++){
scanf("%d",&a[i]);
}

//Calculating sum
for(int i=0 ; i<n ; i++){
if (a[i]%2==0) even+=a[i];
else odd+=a[i];
}

printf("Sum of Even = %d\nSum of Odd = %d",even,odd);

return 0;
}
```

The screenshot displays the Visual Studio Code interface. The Explorer panel on the left shows a project named 'DS_ISE_2023' with files like '.vscode', 'Assignment', 'Lecture 1', 'Lecture 2', 'a.out', 'add two array.c', 'array.c', 'Assignment 2.txt', and 'odd even in array.c'. The main editor window shows the C program code, which is identical to the one provided in the previous block. The bottom panel shows the 'TERMINAL' output, where the program has been executed. The output shows the user entering the size of the array as 5 and then 5 elements: 111, 222, 333, 444, and 555. The program calculates the sum of even numbers (666) and the sum of odd numbers (999).

```
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File Edit Selection View Go ...
DS_ISE_2023
  .vscode
  Assignment
  Lecture 1
  Lecture 2
    a.out
    add two array.c
    array.c
    Assignment 2.txt
    odd even in array.c
  Structure
  Union
  .gitignore

Assignment > Lecture 2 > odd even in array.c > main()
1 // Program to add odd and even in an array
2 #include <stdio.h>
3
4 int main(){
5     int a[100],n,odd=0,even=0;
6
7     //Taking input of array
8     printf("Enter Size of array 1\n");
9     scanf("%d",&n);
10    printf("Enter %d Elements \n",n);
11    for(int i=0 ; i<n ; i++){
12        scanf("%d",&a[i]);
13    }
14
15    //Calculating sum
16    for(int i=0 ; i<n ; i++){
17        if (a[i]%2==0) even+=a[i];
18        else odd+=a[i];
19    }
20
21    printf("Sum of Even = %d\nSum of Odd = %d",even,odd);
22
23    return 0;
24 }

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
bash - Lecture 2
[suvanbanerjee@elitebook-830-g5 Lecture 2]$ ./a.out
Enter Size of array 1
5
Enter 5 Elements
111 222 333 444 555
Sum of Even = 666
Sum of Odd = 999[suvanbanerjee@elitebook-830-g5 Lecture 2]$
```