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**Home Assignment**

**Program 1**

**Question:**

WAP to arrange the elements of an array such that all even numbers are followed by all odd numbers.

**Code:**

#include<stdio.h>

#include<stdlib.h>

typedef struct

{

int size;

}use;

//we made the structure

int main()

{

use\* e1=(use\*) malloc(sizeof(use\*));

printf("\nEnter the size of the array\n");

scanf("%d",&e1->size);

int arr[e1->size];

printf("\nEnter the elements of the array\n");

for(int i=0;i<e1->size;i++)

{

scanf("%d",&arr[i]);

}

int \*ptr=arr;

//we created the pointer

for(int i=0;i<e1->size;i++)

{

for(int j=i+1;j<e1->size;j++)

{

if(\*(ptr+i)%2!=0)

{

int temp=\*(ptr+j);

\*(ptr+j)=\*(ptr+i);

\*(ptr+i)=temp;

}

}

}

//array is sorted

printf("\n");

for(int i=0;i<e1->size;i++)

{

printf("%d\t",\*(ptr+i));

}

//array printed

return 0;

}

//end of main method

**Output:**

