**Array in C Language**

**Assignment – 14**

**1.** **#include<stdio.h>**

**int main()**

**{**

**int a[10];**

**int i,sum=0;**

**printf("ENTER 10 NOs=");**

**for( i=0;i<=9;i++)**

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

**for( i=0;i<=9;i++)**

**sum=sum+a[i];**

**printf("SUM OF ENTERED 10 NOs ARE=%d",sum);**

**return 0;**

**}**

**2.** **#include<stdio.h>**

**int main()**

**{**

**int a[10];**

**int i,sum=0;**

**float avg=0;**

**printf("ENTER 10 NOs=");**

**for( i=0;i<=9;i++)**

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

**for( i=0;i<=9;i++)**

**sum=sum+a[i];**

**avg=sum/10;**

**printf("AVERAGE OF 10 Nos ARE=%f",avg);**

**return 0;**

**}**

**3.** **include<stdio.h>**

**int main()**

**{**

**int i,addeven=0,addodd=0;**

**int sum[10];**

**printf("\nENTER 10 NOs=");**

**for (i=0;i<=9;i++)**

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

**// even no check and sum it**

**for(i=0;i<=9;i++)**

**if(sum[i]%2==0)**

**{**

**addeven=addeven+sum[i];**

**}**

**else**

**{**

**addodd=addodd+sum[i];**

**}**

**printf("SUM OF EVEN NO=%d",addeven);**

**printf("\nSUM OF odd NO=%d",addodd);**

**return 0;**

**}**

**4.** **#include<stdio.h>**

**int main()**

**{**

**int a[10];**

**int i,max=0;**

**printf("ENTER 10 NOs=");**

**for( i=0;i<=9;i++)**

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

**for( i=0;i<=9;i++)**

**if(a[i]>max)**

**max=a[i];**

**printf("GREATEST NO STORED IN ARRAY IS=%d",max);**

**return 0;**

**}**

**5.** **#include<stdio.h>**

**int main()**

**{**

**int a[10];**

**int i,min=a[0];**

**printf("ENTER 10 NOs=");**

**for( i=0;i<=9;i++)**

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

**for( i=0;i<=9;i++)**

**if(min>a[i])**

**min=a[i];**

**printf("SMALLEST NO STORED IN ARRAY IS=%d",min);**

**return 0;**

**}**

**6.** **#include<stdio.h>**

**int main()**

**{**

**int a[10],temp=0,i,b;**

**printf("ENTER 10 ELEMENTS=\n");**

**for(i=0;i<=9;i++)**

**{**

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

**}**

**for (int i=0;i<=9;i++)**

**for (int j=i+1;j<=9;j++)**

**{**

**if(a[i]>a[j])**

**{**

**temp=a[i];**

**a[i]=a[j];**

**a[j]=temp;**

**}**

**}**

**printf("\nARRAY AFTER SHORT=");**

**for(i=0;i<=9;i++)**

**printf("%d ",a[i]);**

**return 0;**

**}**

**7.** **#include <stdio.h>**

**#include <limits.h>**

**int main()**

**{**

**int arr[50], i, Size;**

**int first, second;**

**printf("\n Please Enter the Number of elements in an array : ");**

**scanf("%d", &Size);**

**printf("\n Please Enter %d elements of an Array \n", Size);**

**for (i = 0; i < Size; i++)**

**{**

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

**}**

**first = second = INT\_MIN;**

**for (i = 0; i < Size; i++)**

**{**

**if(arr[i] > first)**

**{**

**second = first;**

**first = arr[i];**

**}**

**else if(arr[i] > second && arr[i] < first)**

**{**

**second = arr[i];**

**}**

**}**

**printf("\n The Largest Number in this Array = %d", first);**

**printf("\n The Second Largest Number in this Array = %d", second);**

**return 0;**

**}**

**8.** **#include <stdio.h>**

**#include <limits.h>**

**int main()**

**{**

**int a[50], i, Size,j,temp;**

**printf("\n Please Enter the Number of elements in an array : ");**

**scanf("%d", &Size);**

**printf("\n Please Enter %d elements of an Array \n", Size);**

**for (i = 0; i < Size; i++)**

**{**

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

**}**

**for (i = 0; i < Size; i++)**

**{**

**for (j = i+1; j < Size; j++)**

**{**

**if(a[i]<a[j])**

**{**

**temp=a[i];**

**a[i]=a[j];**

**a[j]=temp;**

**}**

**}**

**}**

**printf("\n The Second smallest Number in this Array = %d", a[i-2]);**

**return 0;**

**}**

**9.** **#include <stdio.h>**

**int main()**

**{**

**int a[50], i, Size,j,temp;**

**printf("\n Please Enter the Number of elements in an array : ");**

**scanf("%d", &Size);**

**printf("\n Please Enter %d elements of an Array \n", Size);**

**for (i = 0; i < Size; i++)**

**{**

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

**}**

**printf("REVERSE ORDER ARE");**

**for(i=Size;i>0;i--)**

**printf("%d ",a[i]);**

**return 0;**

**}**

**10.** **#include <stdio.h>**

**int main()**

**{**

**int i, Size,j,temp;**

**int a[50];**

**int b[50];**

**printf("\n Please Enter the Number of elements in an array : ");**

**scanf("%d", &Size);**

**printf("\n Please Enter %d elements of an Array \n", Size);**

**for (i = 0; i < Size; i++)**

**{**

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

**}**

**printf("COPIED ELEMENTS IN OTHER ARRAY");**

**for(i=0;i<Size;i++)**

**{**

**b[i]=a[i];**

**temp =b[i];**

**}**

**for(i=0;i<Size;i++)**

**printf("%d ",b[i]);**

**return 0;**

**}**