

## Assignment 7

//print alternate numbers

#include<stdio.h>

void main(){

int arr[7]={1,2,3,4,5,6,7};

for(int i=0;i<7;i=i+2){

printf("%d \t",arr[i]);

}

}

//print alternate numbers

#include<stdio.h>

void main(){

int arr[7]={1,2,3,4,5,6,7};

for(int i=0;i<7;i=i+2){

printf("%d \t",arr[i]);

}

}

//merge

#include <stdio.h>

void main(){

int arr[20];

int brr[5];

int n;

int s\_arr=20;

int s\_brr=5;

```
printf("how many element of of arr wants to enter:");
scanf("%d",&n);
int i;
printf("Enter the elements of arr:\n");
for(i=0;i<n;i++){
    scanf("%d",&arr[i]);
}
```

```
    printf("Enter the elements of brr:\n");
for(int p=0;p<n;p++){
    scanf("%d",&brr[p]);
}
```

```
//merge
```

```
printf("\ni:%d\n",i);
for(int j=0;j<5;j++){
    arr[i]=brr[j];
    i++;//incresing index of arr
}
```

```
// print arr
```

```
printf("Arr :\n");
for(int k=0;k<(n+s_brr);k++){
    printf("%d\n",arr[k]);
}
```

```
}
```

```
//merge
```

```
#include <stdio.h>
```

```
void main(){
```

```
    int arr[20];
```

```
    int brr[5];
```

```
    int n;
```

```
    int s_arr=20;
```

```
    int s_brr=5;
```

```
    printf("how many element of of arr wants to enter:");
```

```
    scanf("%d",&n);
```

```
    int i;
```

```
    printf("Enter the elements of arr:\n");
```

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

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

```
    }
```

```
        printf("Enter the elements of brr:\n");
```

```
    for(int p=0;p<n;p++){
```

```
        scanf("%d",&brr[p]);
```

```
    }
```

```
//merge
```

```

printf("\ni:%d\n",i);

    for(int j=0;j<5;j++){
        arr[i]=brr[j];
        i++;//increasing index of arr
    }

// print arr

printf("Arr :\n");
    for(int k=0;k<(n+s_brr);k++){
        printf("%d\n",arr[k]);
    }

}

//accept element and print only prime numbers
#include<stdio.h>

void main(){
    int arr[5];
    int size=5;
    printf("Enter the elements in the array:\n");
    for(int i=0;i<size;i++){
        scanf("%d",&arr[i]);
    }

    printf("array elements :");
    for(int i=0;i<size;i++){
        printf("%d \t",arr[i]);
    }
}

```

```

//check for each prime or not
int j;
for(int i=0;i<size;i++){
    //arr[i] is one element of array
    //loop for 2 to n-1 to check divisible or not
    //printf("inside i for loop\n");
    for(j=2;j<arr[i];j++){
        //printf("inside j for loop\n");
        if(arr[i]%j!=0){
            //2 3 4 5
        }
        else{
            break;//it is divisible
        }
    }

    //check prime or not
    printf("arr[i]:%d j: %d\n\n",arr[i],j );
    if(arr[i]==j) //5==5
        printf("\n index:%d , prime:%d\n",i,arr[i]);
}
}

//reverse
#include<stdio.h>

void main(){
    int arr[5]={10,20,30,40,50};

    int size=5;
    int j=size-1;

```

```

    printf("array before reverse:");

    for(int i=0;i<size;i++){
        printf("%d\t",arr[i]);
    }

    //reverse logic
    for(int i=0;i<size/2;i++){
        int temp=arr[i];
        arr[i]=arr[j];
        arr[j]=temp;
        j--;
    }

    //printing the reverse array
    printf("\n reverse array:");
    for(int i=0;i<size;i++){
        printf("%d\t",arr[i]);
    }
}

//reverse
#include<stdio.h>

void main(){
    int arr[5]={10,20,30,40,50};

    int size=5;
    int j=size-1;

    printf("array before reverse:");
    for(int i=0;i<size;i++){

```

```

        printf("%d\t",arr[i]);
    }

    //reverse logic
    for(int i=0;i<size/2;i++){
        int temp=arr[i];
        arr[i]=arr[j];
        arr[j]=temp;
        j--;
    }

    //printing the reverse array
    printf("\n reverse array:");
    for(int i=0;i<size;i++){
        printf("%d\t",arr[i]);
    }
}

//sorting
#include<stdio.h>

void main(){
    int arr[5]={5,3,4,2,1};
    int size=5,j,temp;

    for(int i=0;i<size-1;i++){

        //holding one elemnt and checking with
        for(j=i+1;j<size;j++){

```

```

        if(arr[i]>arr[j]){
            temp=arr[i];
            arr[i]=arr[j];
            arr[j]=temp;
        }
    }
}

//
printf("sorted array:");
for(int i=0;i<size;i++){
    printf("%d\t",arr[i]);
}
}

//min max in array
#include<stdio.h>
void main(){
    int arr[6]={10,20,50,1,4,7};
    int size=6;
    //max number
    //store max and compare with other elements in the array
    int max=arr[0];

    for(int i=0;i<size;i++){
        if(arr[i]>max){
            max=arr[i];
        }
    }
}

```



```

printf("max number is %d",max);

////////////////////////////////////

//min number

//store min and compare with other elements in the array
int min=arr[0];

for(int j=0;j<size;j++){
    if(arr[j]<min){
        min=arr[j];
    }
}

printf("\nmin is %d",min);

}

//sum of all elements
#include<stdio.h>
void main(){
    int arr[4]={1,2,3,4};
    int sum=0;
    int size=4;
    for(int i=0;i<size;i++){
        sum=sum+arr[i];
    }
    printf("sum is %d",sum);
}

```