array1.c

```
#include<stdio.h>
int main()
{
int x[10],y,t;
y=0;
while(y<=9)
{
printf("Enter a number : ");
scanf("%d",&x[y]);
y++;
}
t=0;
y=0;
while(y<=9)
{
t=t+x[y];
y++;
}
printf("Total is %d\n",t);
return 0;
}
```

array2.c

```
#include<stdio.h>
int main()
{
int x[10],y,largest;
y=0;
while(y<=9)
{
printf("Enter a number : ");
scanf("%d",&x[y]);
y++;
}
largest=x[0];
y=1;
while(y<=9)
{
if(x[y]>largest)
{
largest=x[y];
}
y++;
}
printf("Largest %d\n",largest);
return 0;
}
```

array3.c

```
#include<stdio.h>
int main()
{
int x[10],y,largest,smallest,secondLargest;
y=0;
while(y<=9)
{
printf("Enter a number : ");
scanf("%d",&x[y]);
y++;
}
largest=x[0];
smallest=x[0];
y=1;
while(y<=9)
{
if(x[y]>largest)
{
largest=x[y];
}
if(x[y]<smallest)
{
smallest=x[y];
}
y++;
}
if(smallest==largest)
{
printf("All are same");
}
else
{
secondLargest=smallest;
y=0;
while(y<=9)
{
if(x[y]>secondLargest && x[y]!=largest)
{
secondLargest=x[y];
}
y++;
}
printf("Second largest %d",secondLargest);
}
return 0;
}
```

array4.c

```
#include<stdio.h>
int main()
{
int x[10],y,largest;
y=0;
while(y<=9)
{
printf("Enter a number : ");
scanf("%d",&x[y]);
y++;
}
y=0;
while(y<=9)
{
if(x[y]%2==0)
{
break;
}
y++;
}
if(y==10)
{
printf("All are odd");
}
else
{
largest=x[y];
y++;
while(y<=9)
{
if(x[y]>largest && x[y]%2==0)
{
largest=x[y];
}
y++;
}
printf("Largest even number is %d\n",largest);
}
return 0;
}
```

array5.c

```
#include<stdio.h>
int main()
{
int x[10],y,largest,smallest,secondLargest,indexOfFirstEven;
y=0;
while(y<=9)
{
printf("Enter a number : ");
scanf("%d",&x[y]);
y++;
}
y=0;
while(y<=9)
{
if(x[y]%2==0)
{
indexOfFirstEven=y;
break;
}
y++;
}
if(y==10)
{
printf("All are odd");
}
else
{
largest=x[indexOfFirstEven];
smallest=x[indexOfFirstEven];
y=indexOfFirstEven+1;
while(y<=9)
{
if(x[y]>largest && x[y]%2==0)
{
largest=x[y];
}
if(x[y]<smallest && x[y]%2==0)
{
smallest=x[y];
```

```
}
y++;
}
if(largest==smallest)
{
printf("All given even numbers are same");
}
else
{
secondLargest=smallest;
y=indexOfFirstEven;
while(y<=9)
{
if(x[y]>secondLargest && x[y]!=largest && x[y]%2==0)
{
secondLargest=x[y];
}
y++;
}
printf("Second largest even number is %d",secondLargest);
}
}
return 0;
}
```

array6.c

```
#include<stdio.h>
int main()
{
int x[10];
int lookFor,found,y;
y=0;
while(y<=9)
{
printf("Enter a number");
scanf("%d",&x[y]);
y++;
}
printf("Enter the number to look for ");
scanf("%d",&lookFor);
y=0;
found=0;
while(y<=9)
{
if(x[y]==lookFor)
{
found=1;
break;
}
y++;
}
if(found==0)
{
printf("Not found");
}
else
{
printf("Found");
}
return 0;
}
```

array7.c

```
#include<stdio.h>
int main()
{
int x[10];
int lookFor,found,y;
y=0;
while(y<=9)
{

printf("Enter a number");
scanf("%d",&x[y]);
y++;
}
printf("Enter the number to look for ");
scanf("%d",&lookFor);
y=0;
found=0;
while(y<=9)
{
if(x[y]==lookFor)
{
found=1;
break;
}
y++;
}
if(found==0)
{
printf("Not found");
}
else
{
printf("Found at index %d",y);
}
return 0;
}
```

array8.c

```
#include<stdio.h>
int main()
{
int x[10],y,lookFor,count;
y=0;
while(y<=9)
{
printf("Enter a number");
scanf("%d",&x[y]);
y++;
}
printf("Enter the number to look for ");
scanf("%d",&lookFor);
y=0;
count=0;
while(y<=9)
{
if(lookFor==x[y])

{
count++;
}
y++;
}
if(count==1)
{
printf("%d occurs 1 time",lookFor);
}
else
{
printf("%d occurs %d times",lookFor,count);
}
return 0;
}
```

array9.c

```
#include<stdio.h>
int main()
{
int x[10],y,lookFor,count;
y=0;
while(y<=9)
{
printf("Enter a number");
scanf("%d",&x[y]);
y++;
}
lookFor=x[0];
y=0;
count=0;
while(y<=9)
{
if(lookFor==x[y])
{
count++;
}
y++;
}
if(count==1)
{
printf("%d occurs 1 time",lookFor);
}
else
{
printf("%d occurs %d times",lookFor,count);
}

return 0;
}
```

array10.c

```
#include<stdio.h>
int main()
{
int x[10],y,lookFor,count,z;
y=0;
while(y<=9)
{
printf("Enter a number");
scanf("%d",&x[y]);
y++;
}
z=0;
while(z<=9)
{
lookFor=x[z];
y=0;
count=0;
while(y<=9)
{
if(lookFor==x[y])
{
count++;
}
y++;
}
if(count==1)
{
printf("%d occurs 1 time\n",lookFor);
}
else
{
printf("%d occurs %d times\n",lookFor,count);
}
z++;
}
return 0;
}
```

array11.c

```
#include<stdio.h>
int main()
{
int x[10],y,lookFor,count,z,found,e;
y=0;

while(y<=9)
{
printf("Enter a number");
scanf("%d",&x[y]);
y++;
}
z=0;
while(z<=9)
{
lookFor=x[z];
found=0;
e=0;
while(e<=z-1)
{
if(lookFor==x[e])
{
found=1;
break;
}
e++;
}
if(found==0)
{
count=1;
y=z+1;
while(y<=9)
{
if(lookFor==x[y])
{
count++;
}
y++;
}
```

```
if(count==1)
{
printf("%d occurs 1 time\n",lookFor);
}
else
{
printf("%d occurs %d times\n",lookFor,count);
}
}
z++;
}
return 0;
}
```