

Assignment 1

```

#include<conio.h>

#include<stdio.h>

int main()

{int a[100],i,n,odd=0,even=0;

    printf("input Array a :\n");

    printf("-----\n");

    for(i=1;;i++)

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

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

        if (a[i]<0) break;

    }

    printf("-----\n");

    n=i-1;

    printf("Odd number  : ");

    for(i=1;i<=n;i++)

    {

        if(a[i]%2==1)

        {

            odd++;

            printf(" %2d",a[i]);

        }

    }

    printf("\nTotal  =%2d numbers",odd);

    printf("\nEven number : ");

    for(i=1;i<=n;i++)

    {

        if(a[i]%2==0)

        {

            even++;

            printf(" %2d",a[i]);

        }

    }

}

```

```

    }

}

printf("\nTotal =%2d numbers",even);

getch();

return 0;

}

```

The screenshot shows the Dev-C++ 4.9.9.2 IDE with a C++ program in Lab3.cpp and its output in the console window.

Dev-C++ 4.9.9.2 Interface:

- Menu Bar:** File, Edit, Search, View, Project, Execute, Debug, Tools, CVS, Window, Help.
- Toolbar:** Includes icons for File operations (New, Open, Save, Print, etc.), Edit (Undo, Redo, Cut, Copy, Paste), and Project (Run, Stop, Breakpoint, etc.).
- Project/Classes/Debug:** Tabs for managing the project, classes, and debug information.
- Lab3.cpp:** The source code file being edited.

Source Code (Lab3.cpp):

```

#include<conio.h>
#include<stdio.h>
int main()
{int a[100],i,n,odd=0,even=0;
printf("input Array a :\n");
printf("-----\n");
for(i=1;i++)
{ printf("a[%d] = ",i);
scanf("%d",&a[i]);
if (a[i]<0) break;
}
printf("-----\n");
n=i-1;
printf("Odd number : ");
for(i=1;i<=n;i++)
{
if(a[i]%2==1)
{
odd++;
printf(" %2d",a[i]);
}
}
printf("\nTotal =%2d numbers",odd);
printf("\nEven number : ");
for(i=1;i<=n;i++)
{
if(a[i]%2==0)
{
even++;
printf(" %2d",a[i]);
}
}
printf("\nTotal =%2d numbers",even);
getch();
return 0;
}

```

Output (Console Window):

```

input Array a :
a[1] = 2
a[2] = 7
a[3] = 11
a[4] = 15
a[5] = 18
a[6] = 22
a[7] = 26
a[8] = 29
a[9] = 34
a[10] = -1
-----
Odd number : 7 11 15 29
Total = 4 numbers
Even number : 2 18 22 26 34
Total = 5 numbers

```

The output shows the input array values, followed by a separator line, and then the counts of odd and even numbers and their total sum.

Assignment II EXTRA

```
#include<conio.h>

#include<stdio.h>

int main()

{int a[100],b[100],i,j,nA,nB,S;

    printf("input set a :\n");

    printf("-----\n");

    for(i=1;;i++)

        {

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

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

            if (a[i]<0) break;

        }

    nA=i-1;

    printf("\n\ninput set b :\n");

    printf("-----\n");

    for(i=1;;i++)

        {

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

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

            if (b[i]<0) break;

        }

    printf("-----\n");

    nB=i-1;

    printf("The intersection of set a and b : {");

    for(i=1;i<=nA;i++)

    for(j=1;j<=nB;j++)

        {

            if(a[i]==b[j])

            {

                S=a[i];
```

```
printf("%d",S);
```

```
}
```

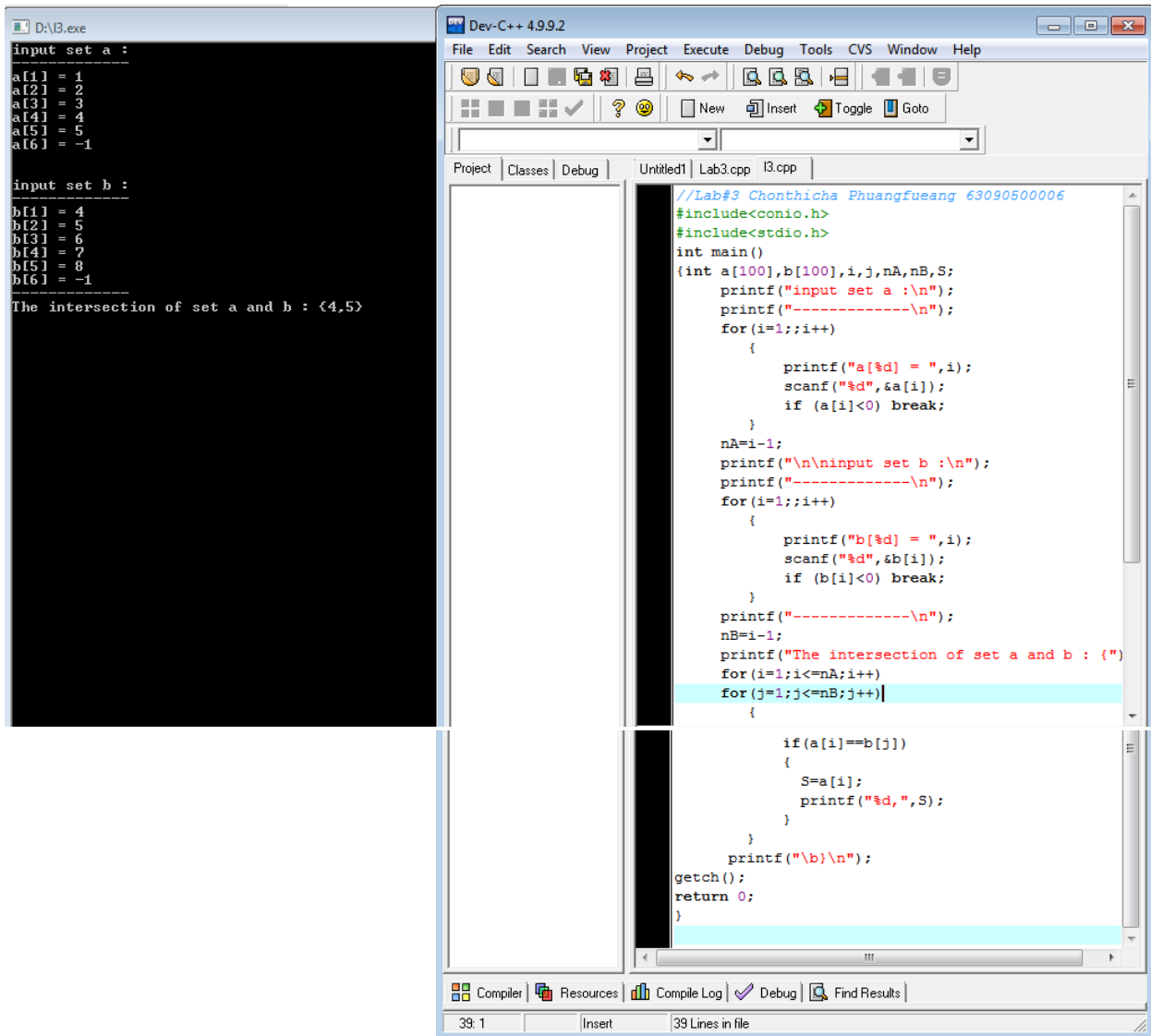
```
}
```

```
printf("\b\n");
```

```
getch();
```

```
return 0;
```

```
}
```



The screenshot displays the Dev-C++ 4.9.9.2 IDE. The main editor window shows a C++ program titled "Lab3.cpp" with the following code:

```
//Lab#3 Chonthicha Phuangfueang 63090500006
#include<conio.h>
#include<stdio.h>
int main()
{int a[100],b[100],i,j,nA,nB,S;
 printf("input set a :\n");
 printf("-----\n");
 for(i=1;i++)
 {
  printf("a[%d] = ",i);
  scanf("%d",&a[i]);
  if (a[i]<0) break;
 }
 nA=i-1;
 printf("\n\ninput set b :\n");
 printf("-----\n");
 for(i=1;i++)
 {
  printf("b[%d] = ",i);
  scanf("%d",&b[i]);
  if (b[i]<0) break;
 }
 printf("-----\n");
 nB=i-1;
 printf("The intersection of set a and b : {");
 for(i=1;i<=nA;i++)
 for(j=1;j<=nB;j++){
  if(a[i]==b[j])
  {
   S=a[i];
   printf("%d,",S);
  }
 }
 printf("\b\n");
 getch();
 return 0;
}
```

The output window on the left shows the program's execution:

```
input set a :
a[1] = 1
a[2] = 2
a[3] = 3
a[4] = 4
a[5] = 5
a[6] = -1

input set b :
b[1] = 4
b[2] = 5
b[3] = 6
b[4] = 7
b[5] = 8
b[6] = -1

The intersection of set a and b : {4,5}
```