

```
/*array insertion*/
```

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

```
int main()
```

```
{
```

```
    int n,i,key,location;
```

```
    printf("enter the value of n\n");
```

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

```
    int a[n];
```

```
    printf("enter the values of array\n");
```

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

```
    {
```

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

```
    }
```

```
    printf("your entered array elements are\n");
```

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

```
    {
```

```
        printf("%d\n",a[i]);
```

```
    }
```

```
    printf("enter the location of new element to be inserted\n");
```

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

```
    printf("enter the value of new element to be inserted\n");
```

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

```
    n++;
```

```
    for(i=n-1;i>=location;i--)
```

```
    {
```

```
        a[i]=a[i-1];
```

```
    }
```

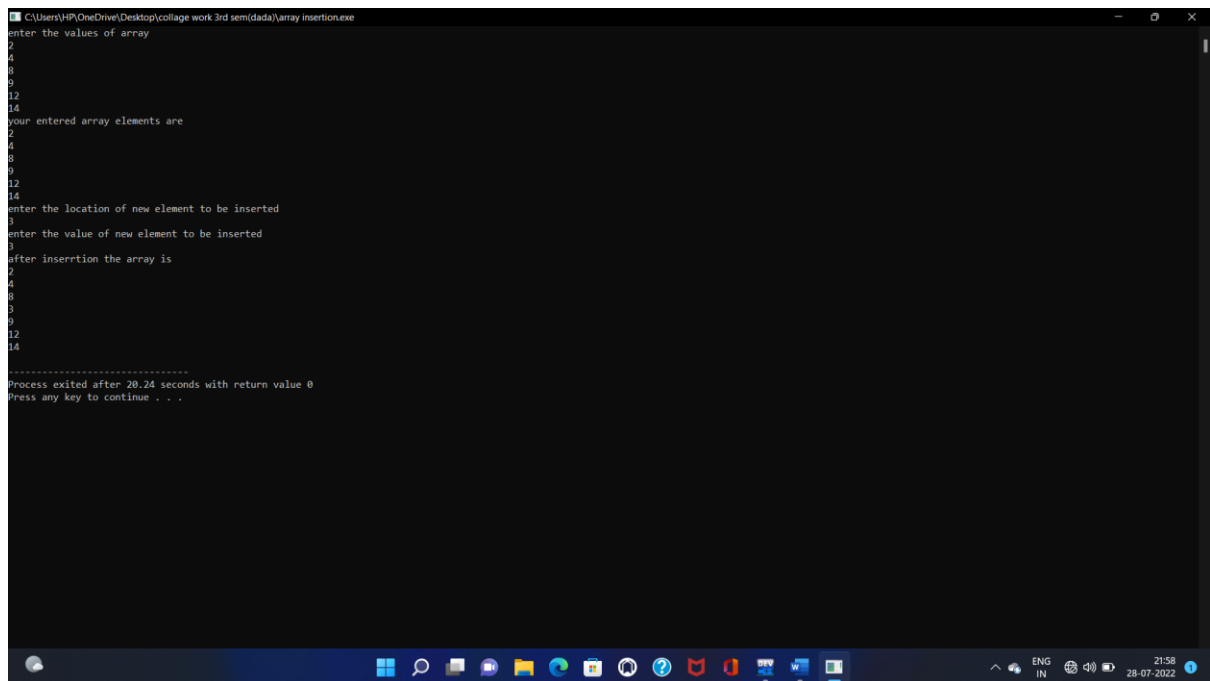
```
    a[location]=key;
```

```
    printf("after insertrtion the array is\n");
```

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

```
    {
```

```
        printf("%d\n",a[i]);  
    }  
    return 0;  
}
```



The screenshot shows a Windows command prompt window titled "C:\Users\HP\OneDrive\Desktop\collage work 3rd sem(dada)\array insertion.exe". The program prompts the user to "enter the values of array" and lists indices 2, 4, 8, 9, 12, and 14. The user enters the values 2, 4, 8, 9, 12, and 14. The program then prompts for "your entered array elements are" and lists the same indices. The user enters the same values. The program then prompts for "enter the location of new element to be inserted" and the user enters 3. It then prompts for "enter the value of new element to be inserted" and the user enters 3. The program then displays "after insertion the array is" and lists the values 2, 4, 8, 3, 9, 12, and 14. The program then displays "Process exited after 20.24 seconds with return value 0" and "Press any key to continue . . .".

```
C:\Users\HP\OneDrive\Desktop\collage work 3rd sem(dada)\array insertion.exe  
enter the values of array  
2  
4  
8  
9  
12  
14  
your entered array elements are  
2  
4  
8  
9  
12  
14  
enter the location of new element to be inserted  
3  
enter the value of new element to be inserted  
3  
after insertion the array is  
2  
4  
8  
3  
9  
12  
14  
-----  
Process exited after 20.24 seconds with return value 0  
Press any key to continue . . .
```