Insertion

CODE 1 :

```c
#include<stdio.h>

int main(){

 int j;
 printf("ENTER THE SIZE OF A ARRAY:\n");
 scanf("%d", &j);

 int array[j];
 printf("Enter the value of array:\n");
 for(int i= 0; i<=j; i++){
    scanf("%d", &array[i]);
 }
 printf("Value of the array:\n");
 for(int i= 0; i<=j; i++){
    printf("%d ", array[i]);
 }
  printf("\n");
 int k, item;
 printf("Enter the value of Position:\n");
 scanf("%d", &k);
 printf("Enter the value of a Insert number:\n");
 scanf("%d", &item);
```

```c
for(int n = j ; n>= k; n--){
    array[n+1] = array [n];
}
 array[k] = item;
 j = j+1;

 printf("New array:\n");
 for(int i= 0; i<j+1; i++){
   printf("%d ", array[i]);

 }

 return 0;
}
```

TERMINAL:

```
C:\  "E:\lab class 162.30\insertion    X     +    ⌄

ENTER THE SIZE OF A ARRAY:
4
Enter the value of array:
2
8
3
5
1
Value of the array:
2 8 3 5 1
Enter the value of Position:
2
Enter the value of a Insert number:
9
New array:
2 8 9 3 5 1
Process returned 0 (0x0)    execution time : 15.312 s
Press any key to continue.
```

CODE 2:

```c
#include<stdio.h>

int main() {
    int j;
    printf("ENTER THE SIZE OF A ARRAY:\n");
    scanf("%d", &j);

    int array[j];
    printf("Enter the value of array:\n");
    for(int i = 0; i < j; i++) {
        scanf("%d", &array[i]);
    }

    printf("Value of the array:\n");
    for(int i = 0; i < j; i++) {
        printf("%d ", array[i]);
    }
    printf("\n");

    int k;
    printf("Enter the position to delete: ");
    scanf("%d", &k);


    for(int i = k; i < j - 1; i++) {
        array[i] = array[i + 1];
    }
```

```c
    j = j - 1;

    printf("New array:\n");
    for(int i = 0; i < j; i++) {
        printf("%d ", array[i]);
    }
    printf("\n");

    return 0;
}
```

TERMINAL:

```
ENTER THE SIZE OF A ARRAY:
4
Enter the value of array:
1
2
4
2
Value of the array:
1 2 4 2
Enter the position to delete: 1
New array:
1 4 2

Process returned 0 (0x0)    execution time : 9.217 s
Press any key to continue.
```