

### EX1:

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

```
int main()
{
    int m = 29;
    printf("Address of m : 0x%x\n", &m);
    printf("Value of m : %d\n", m);
    int* ab = &m;
    printf("Now ab is assigned with the address of m.\n");
    printf("Address of pointer ab : 0x%x\n", ab);
    printf("Content of ab: %d\n", *ab);

    *ab = 34;
    printf("The value of m assigned to 34 now.\n");
    printf("Address of pointer ab : 0x%x\n", ab);
    printf("Content of ab: %d\n", *ab);

    *ab = 7;
    printf("The pointer variable ab is assigned with the value 7 now\n");
    printf("Address of m : 0x%x\n", &m);
    printf("Value of m : %d\n", m);

    return 0;
}
```

### EX2:

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

```
int main()
{
    char c = 'A';
    char *ptr = &c;
    int i;
    for(i=0 ; i<(('Z' - 'A')+1) ; i++, c++)
    {
        printf("%c ", *ptr);
    }
    return 0;
}
```

### Ex3:

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

```

#include <stdlib.h>
#include <string.h>

int main()
{
    char st[10];
    int i;

    printf("input a string: ");
    scanf("%s", st);

    char*ptr;
    ptr=&st[(strlen(st)-1)] ;
    for(i=strlen(st) ;i>0 ; i--,ptr--)
    {
        printf("%c",*ptr);
    }
    return 0;
}

```

#### EX4:

```

#include <stdio.h>
#include <stdlib.h>
#include <string.h>

int main()
{
    int i,e_num;
    printf("Input the number of elements to store in the array (max 15) :");
    scanf("%d",&e_num);

    int arr[e_num];
    printf("Input 5 number of elements in the array :\n");

    for(i=0 ; i<e_num ; i++)
    {
        printf("element - %d: ",i+1);
        scanf("%d",&arr[i]);
    }

    int*ptr = arr+e_num-1;
    printf("The elements of array in reverse order are :\n");
    for(i=e_num-1 ; i>=0 ; i--)
    {

        printf("element - %d: %d\n",i,*ptr--);
    }
}

```

```

    // ptr--;

}

return 0;
}

```

## EX5:

```

struct employee
{
    int id;
    char name[10];
};
/***** MAIN *****/
int main()
{
    struct employee s1 = {123,"eslam"};
    struct employee s2 = {345,"youssef"};
    struct employee s3 = {567,"hosny"};

    struct employee * arr[3] = {&s1,&s2,&s3};

    struct employee *(*ptr)[3];
    ptr=arr;

    printf("%d\t%s\n",(**ptr)->id, (**ptr)->name);
    printf("%d\t%s\n",(**ptr-1)->id,(**ptr-1)->name);
    printf("%d\t%s\n",(**ptr-2)->id,(**ptr-2)->name);

    return 0;
}
/*****/

```

## EX6: