

```
//32 default array 2D&3D function
```

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

```
void arr2();
```

```
void arr3();
```

```
int arr2d[10][10], arr3d[10][10][10], i, j, k, s1, s2, s3 ;
```

```
int main()
```

```
{
```

```
    int con, choice;
```

```
    con = 1;
```

```
    while(con == 1)
```

```
    {
```

```
        printf("choose an array (2 for 2D, 3 for 3D) : ");
```

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

```
        if(choice == 2)
```

```
        {
```

```
            arr2();
```

```
        }
```

```
        else if (choice == 3)
```

```
        {
```

```
            arr3();
```

```
        }
```

```
        else
```

```
        {
```

```
            printf("wrong input\n");
```

```
        }
```

```
        printf("continues ? (1 for continues) : ");
```

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

```
    }
```

```
}
```

```
void arr2()
```

```
{
```

```
    printf("input first slot size (not more than 10) : ");
```

```
    scanf("%d", &s1);
```

```
    printf("input second slot size (not more than 10) : ");
```

```
    scanf("%d", &s2);
```

```
    if((s1 > 0 && s1 < 10) && (s2 > 0 && s2 < 10))
```

```
    {
```

```

        for(i = 0 ; i < s1 ; i++)
        {
            for(j = 0 ; j < s2 ; j++)
            {
                arr2d[i][j] = 0 ;
            }
        }
        //print
        for(i = 0 ; i < s1 ; i++)
        {
            for(j = 0 ; j < s2 ; j++)
            {
                printf("Array 2D [%d][%d] = %d\n",i ,j, arr2d[i][j]);
            }
        }
    }
    else
    {
        printf("wrong input\n");
    }
}

```

void arr3()

```

{
    printf("input first slot size (not more than 10) : ");
    scanf("%d", &s1);
    printf("input secound slot size (not more than 10) : ");
    scanf("%d", &s2);
    printf("input third slot size (not more than 10) : ");
    scanf("%d", &s3);
    if((s1 > 0 && s1 <10) && (s2 > 0 && s2 < 10) && (s3 > 0 && s3 < 10))
    {
        for(i = 0 ; i < s1 ; i++)
        {
            for(j = 0 ; j < s2 ; j++)
            {
                for(k = 0 ; k < s3 ; k++)
                {
                    arr3d[i][j][k] = 0 ;
                }
            }
        }
    }
}

```

```
}
//print
for(i = 0 ; i < s1 ; i++)
{
    for(j = 0 ; j < s2 ; j++)
    {
        for(k = 0 ; k < s3 ; k++)
        {
            printf("Array 3D [%d][%d][%d] = %d\n",i ,j, k, arr3d[i][j][k]);
        }
    }
}
else
{
    printf("wrong input\n");
}
}
```