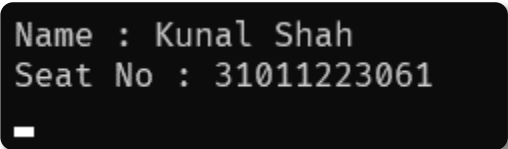


❖ Aim – Program to print name and roll number of a student

➤ Source Code –

```
#include <conio.h>
#include <stdio.h>
void main()
{
    printf("Name : Kunal Shah\n");
    printf("Seat No : 31011223061\n");
    getch();
}
```

➤ Output –

A screenshot of a terminal window with a black background and white text. It displays the output of the first program: "Name : Kunal Shah" on the first line and "Seat No : 31011223061" on the second line. A small white cursor is visible at the end of the second line.

```
Name : Kunal Shah
Seat No : 31011223061
```

❖ Aim – Accept 2 float numbers from user and perform addition, subtraction, multiplication and division of the numbers

➤ Source Code –

```
#include <conio.h>
#include <stdio.h>
void main()
{
    float a, b;
    printf("Enter the first number: ");
    scanf("%f", &a);
    printf("Enter the second number: ");
    scanf("%f", &b);
    printf("Addition: %f + %f = %f\n", a, b, a + b);
    printf("Subtraction: %f - %f = %f\n", a, b, a - b);
    printf("Multiplication: %f * %f = %f\n", a, b, a * b);
    if (b != 0)
    {
        printf("Division: %f / %f = %f\n", a, b, a / b);
    }
    else
    {
        printf("Division by zero is not allowed.\n");
    }
    getch();
}
```

➤ Output –

```

Enter the first number: 5
Enter the second number: 2
Addition: 5.000000 + 2.000000 = 7.000000
Subtraction: 5.000000 - 2.000000 = 3.000000
Multiplication: 5.000000 * 2.000000 = 10.000000
Division: 5.000000 / 2.000000 = 2.500000

```

❖ Aim – Using '*' Symbol print 'A' in console windows

➤ Source Code –

```

#include <conio.h>
#include <stdio.h>
void main()
{
    printf("
        *
        \n");
    printf("
        * *
        \n");
    printf("
        *   *
        \n");
    printf("
        *       *
        \n");
    printf("
        *           *
        \n");
    printf("
        *               *
        \n");
    printf("
        *****
        \n");
    printf("
        *               *
        \n");
    printf("
        *           *
        \n");
    printf("
        *       *
        \n");
    printf("
        *   *
        \n");
    printf("
        *
        \n");

    getch();
}

```

➤ Output –

```

      *
     * *
    *   *
   *     *
  *       *
 *         *
*****
 *         *
  *       *
   *     *
    *   *
     * *
      *

```

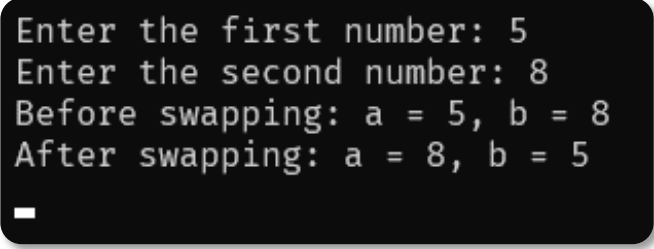
❖ Aim – Take two numbers as variable value from user and swap them using 3 variables

➤ Source Code –

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

void main()
{
    int a, b, temp;
    printf("Enter the first number: ");
    scanf("%d", &a);
    printf("Enter the second number: ");
    scanf("%d", &b);
    printf("Before swapping: a = %d, b = %d\n", a, b);
    temp = a;
    a = b;
    b = temp;
    printf("After swapping: a = %d, b = %d\n", a, b);
    getch();
}
```

➤ Output –

A screenshot of a terminal window with a dark background and light green text. It shows the output of the C program: 'Enter the first number: 5', 'Enter the second number: 8', 'Before swapping: a = 5, b = 8', and 'After swapping: a = 8, b = 5'. A cursor is visible at the end of the last line.

```
Enter the first number: 5
Enter the second number: 8
Before swapping: a = 5, b = 8
After swapping: a = 8, b = 5
_
```

❖ Aim – Take two numbers as variable value from user and swap them using 2 variables

➤ Source Code –

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

void main()
{
    int a, b;
    printf("Enter the first number: ");
    scanf("%d", &a);
    printf("Enter the second number: ");
    scanf("%d", &b);
    printf("Before swapping: a = %d, b = %d\n", a, b);
}
```

```

a = a + b;
b = a - b;
a = a - b;

printf("After swapping: a = %d, b = %d\n", a, b);

getch();
}

```

➤ Output –

```

Enter the first number: 1
Enter the second number: 7
Before swapping: a = 1, b = 7
After swapping: a = 7, b = 1
_

```

❖ Aim – Accept values for length, breadth and side from user and give area for rectangle and square

➤ Source Code –

```

#include <conio.h>
#include <stdio.h>

void main()
{
    float length, width, side;

    printf("Enter the length of the rectangle : ");
    scanf("%f", &length);

    printf("Enter the width of the rectangle : ");
    scanf("%f", &width);

    printf("Enter the side of the square : ");
    scanf("%f", &side);

    printf("Area of the rectangle : %f\n", length * width);

    printf("Area of the square : %f\n", side * side);

    getch();
}

```

➤ Output –

```
Enter the length of the rectangle : 5
Enter the width of the rectangle : 6
Enter the side of the square : 7
Area of the rectangle : 30.000000
Area of the square : 49.000000
_
```

- ❖ Aim – Accept values for distance covered and time required by bike from user and display speed of the bike according to input

➤ Source Code –

```
#include <conio.h>
#include <stdio.h>
void main()
{
    float distance, time, speed;
    printf("Enter the distance traveled by the bike (in km): ");
    scanf("%f", &distance);

    printf("Enter the time taken by the bike (in hours): ");
    scanf("%f", &time);

    speed = distance / time;

    printf("The speed of the bike is %.2f km/h\n", speed);

    getch();
}
```

➤ Output –

```
Enter the distance traveled by the bike (in km): 120
Enter the time taken by the bike (in hours): 1.5
The speed of the bike is 80.00 km/h
_
```