



**PRACTICAL FILE**  
**OF**  
**PROGRAMMING IN C**  
**COURSE CODE -CSEG1041**  
**SCHOOL OF COMPUTER SCIENCE**

**SUBMITTED BY:**

**NAME:**MANAN

**SAP ID:**590028349

**COURSE :**BSC CS

**SEMESTER:**01

**BATCH:**01

**ACADEMIC YEAR:**2025-2026

**SUBMITTED BY:**

## Experiment 3: Conditional Statements

***// Write a C program to check whether a number is Even or ODD***

```
#include <stdio.h>

int main() {

printf("Name -Manan\n");

    printf("SAP ID:590028349\n");

    printf("Course - bsc CS\n");

    printf("batch-01\n");

    printf("\n-----\n");

int num;

    printf("Enter a number: ");

    scanf("%d", &num);

if(num % 2 == 0)

    printf("%d is Even\n", num);

else

    printf("%d is Odd\n", num);

return 0;

}
```

**Output:**



C:\Users\USER\Desкто



Name -Manan

SAP ID:590028349

Course - bsc CS

batch-01

-----

Enter a number: 6

6 is Even

-----

***// WAP to check if the triangle is valid or not. If the validity is established, do check if the triangle is isosceles, equilateral, right angle, or scalene. Take sides of the triangle as input from a user.***

```
#include <stdio.h>

int main() {

printf("Name - Manan \n");

    printf("SAP ID:590028349\n");

    printf("Course - bsc CS\n");

    printf("batch-01\n");

    printf("\n-----\n");

int a, b, c;

    printf("Enter three sides of the triangle: ");

    scanf("%d %d %d", &a, &b, &c);

if((a + b > c) && (a + c > b) && (b + c > a)) {

    printf("Triangle is Valid.\n");

if(a == b && b == c)

    printf("It is an Equilateral Triangle.\n");

else if(a == b || b == c || a == c)

    printf("It is an Isosceles Triangle.\n");

else

    printf("It is a Scalene Triangle.\n");

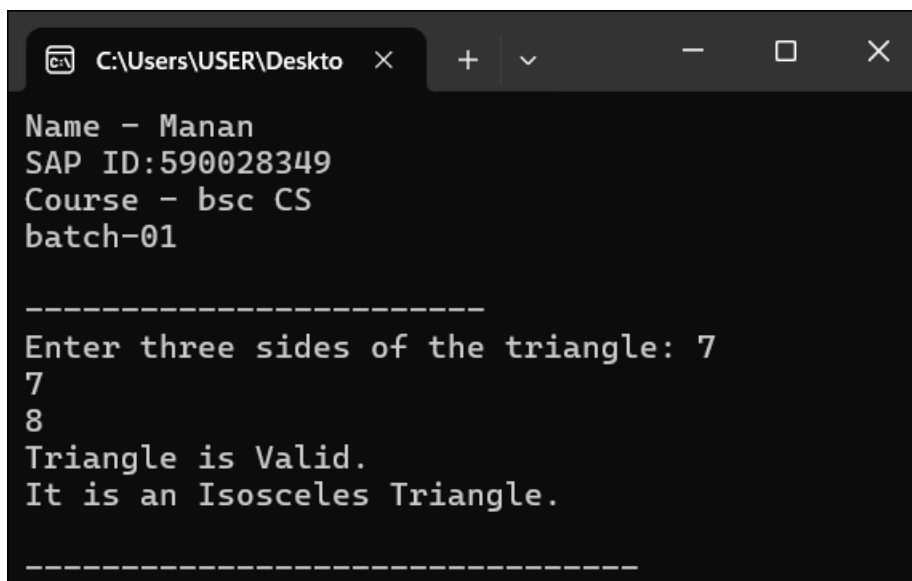
if((a*a == b*b + c*c) || (b*b == a*a + c*c) || (c*c == a*a + b*b))

    printf("It is also a Right-angled Triangle.\n");

}
```

```
else {  
    printf("Triangle is NOT Valid.\n");  
}  
return 0;  
}
```

## OUTPUT:



A screenshot of a Windows command prompt window. The title bar shows the file path 'C:\Users\USER\Desktop' and standard window controls. The output of the program is displayed in a monospaced font. It starts with personal information, followed by a separator line. Then it prompts for three sides of a triangle, with the user entering '7' and '8'. The program then outputs 'Triangle is Valid.' and 'It is an Isosceles Triangle.', followed by another separator line.

```
C:\Users\USER\Desktop >  
Name - Manan  
SAP ID:590028349  
Course - bsc CS  
batch-01  
  
-----  
Enter three sides of the triangle: 7  
7  
8  
Triangle is Valid.  
It is an Isosceles Triangle.  
-----
```

***// WAP to compute the BMI Index of the person and print the BMI values as per the following ranges. You can use the following formula to compute  $BMI = \text{weight(kgs)} / \text{Height(Mts)} * \text{Height(Mts)}$ .***

| Category       | BMI Range      |
|----------------|----------------|
| Starvation     | < 15           |
| Anorexic       | 15.1 to 17.5   |
| Underweight    | 17.6 to 18.5   |
| Ideal          | 18.6 to 24.9   |
| Overweight     | 25 to 25.9     |
| Obese          | 30 to 39.9     |
| Morbidly Obese | 40.0 and above |

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

```
int main() {
```

```
printf("Name - Manan \n");
```

```
    printf("SAP ID:590028349\n");
```

```
    printf("Course – bsc CS\n");
```

```
    printf("batch-01\n");
```

```
    printf("\n-----\n");
```

```
float weight, height, bmi;
```

```
printf("Enter weight (in kgs): ");
```

```

scanf("%f", &weight);

printf("Enter height (in meters): ");

scanf("%f", &height);

bmi = weight / (height * height);

printf("Your BMI is: %.2f\n", bmi);

if(bmi < 18.5)

    printf("You are Underweight.\n");

else if(bmi >= 18.5 && bmi < 25)

    printf("You are Normal weight.\n");

else if(bmi >= 25 && bmi < 30)

    printf("You are Overweight.\n");

else

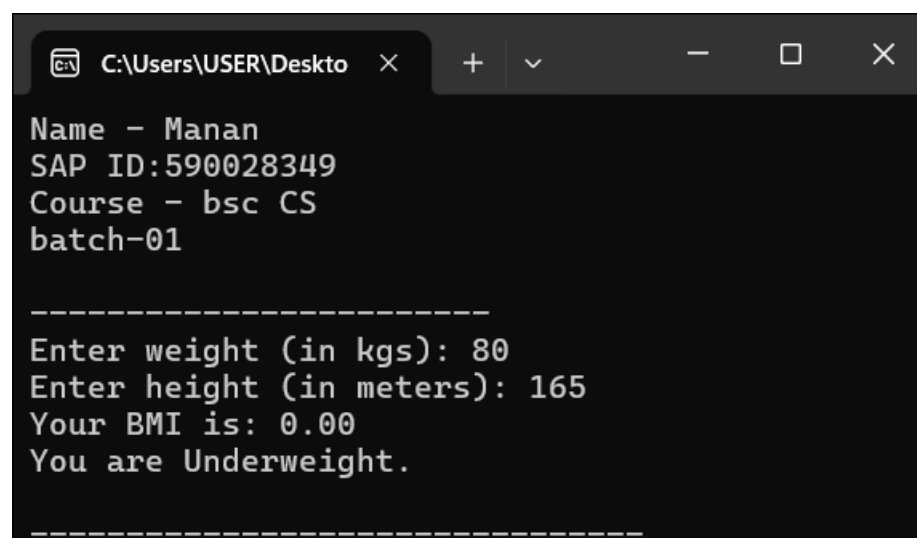
    printf("You are Obese.\n");

return 0;

}

```

## OUTPUT:



The screenshot shows a Windows command prompt window with a dark background. The title bar at the top indicates the file path 'C:\Users\USER\Desktop'. The output of the program is displayed in white text. It starts with personal information: 'Name - Manan', 'SAP ID:590028349', 'Course - bsc CS', and 'batch-01'. This is followed by a horizontal line of dashes. Then, the program prompts for 'Enter weight (in kgs): 80' and 'Enter height (in meters): 165'. It then displays 'Your BMI is: 0.00' and 'You are Underweight.', followed by another horizontal line of dashes.

```

C:\Users\USER\Desktop
Name - Manan
SAP ID:590028349
Course - bsc CS
batch-01

-----
Enter weight (in kgs): 80
Enter height (in meters): 165
Your BMI is: 0.00
You are Underweight.
-----

```