Practical file
of

Programming in C

Course code:CSEG1041
School of Computer Science

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Course: **BCA**
Semester: **1st**
Batch: **B5**
Academic year: **2025-26**

SUBMITTED TO
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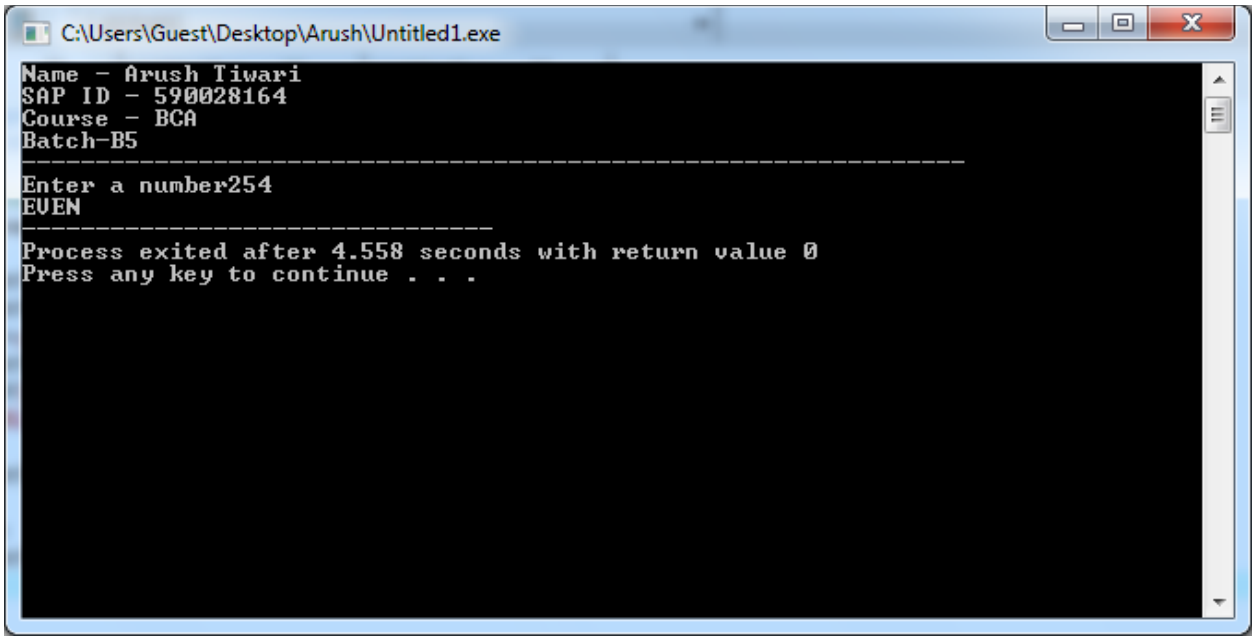
/*Experiment 3: Conditional Statements
3.1.Write a C program to check whether a number is Even or ODD
***/**

```
#include <stdio.h>
int main()
{
printf("Name - Arush Tiwari \nSAP ID - 590028164 \nCourse - BCA \nBatch-B5");
printf("\n----------------------------------------------------------------\n");
int n;
printf("Enter a number");
scanf("%d",&n);
if(n%2==0)
{
printf("EVEN");
}
else
printf("ODD");
}
```

OUTPUT:

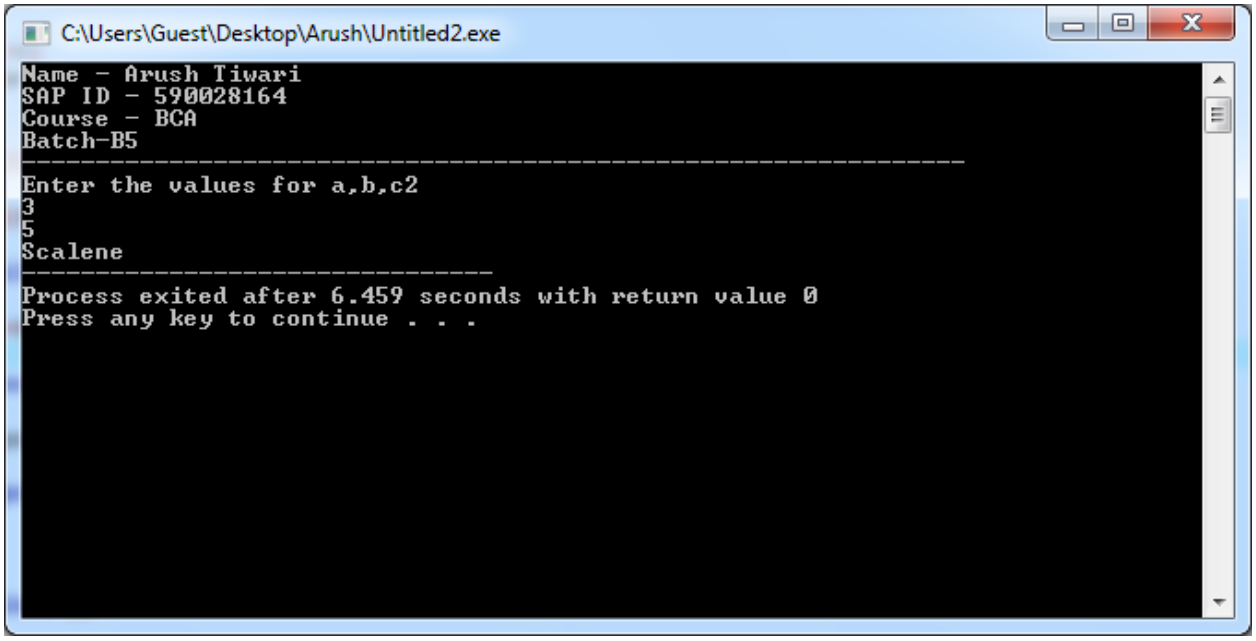


/*3.2. WAP to check if the triangle is valid or not. If the validity is established, do check if the triangle is isosceles, equilateral, right angle, or scalene.
Take sides of the triangle as input from a user.
***/**

```
#include <stdio.h>
#include <math.h>
int main(void)
{
printf("Name - Arush Tiwari \nSAP ID - 590028164 \nCourse - BCA \nBatch-B5");
```

```
printf("\n----------------------------------------------------------------\n");
int a,b,c, sum=0;
printf("Enter the values for a,b,c");
scanf("%d%d%d",&a,&b,&c);
int hypotenuse,perpendicular,base;
if((a>b)&&(a>c))
{
hypotenuse =a;
perpendicular = b;
base = c;
}
else if((b>a)&&(b>c))
{
hypotenuse =b;
perpendicular = a;
base = c;
}
else
{
hypotenuse =c;
perpendicular = a;
base = b;
}
if(((a+b)>c)||((b+c)>a)||((a+c)>b))
{
if((a==b)&&(b==c))
{
printf("Equilateral");
}
else if((a==b)||(b==c)||a==c)
{
printf("Isosceles");
}
else if((hypotenuse*hypotenuse)==(perpendicular*perpendicular)+(base*base))
{
printf("Right Angled traingle");
}
else
{
printf("Scalene");
}
}
return 0;
}
```

OUTPUT:



/*3.3. 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= weight(kgs)/Height(Mts)*Height(Mts).
***/**

```
#include <stdio.h>
int main()
{
printf("Name - Arush Tiwari \nSAP ID - 590028164 \nCourse - BCA \nBatch-B5");
printf("\n-----------------------------------------------------------------\n");
float weight, height, bmi;
printf("Enter weight in kg: ");
scanf("%f", &weight);
printf("Enter height in meters: ");
scanf("%f", &height);
bmi = weight / (height * height);
printf("BMI Index: %.2f", bmi);
if(bmi < 15) {
printf("Starvation");
} else if(bmi >= 15.1 && bmi <= 17.5) {
printf("Anorexic");
} else if(bmi >= 17.6 && bmi <= 18.5) {
printf("Underweight");
} else if(bmi >= 18.6 && bmi <= 24.9) {
printf("Ideal");
} else if(bmi >= 25 && bmi <= 25.9) {
printf("Overweight");
} else if(bmi >= 26 && bmi <= 29.9) {
printf("Obese");
} else if(bmi >= 30 && bmi <= 39.9) {
printf("Obese");
```

```
} else if(bmi >= 40.0) {
printf("Morbidity Obese");
}
return 0;
}
```

OUTPUT: