ASSIGNMENT WEEK 1

Q 1. Write a C program to display your basic information like name, regd no. (only last 3 digits), branch and your hobbies.

(In this question, you'll learn how to take an input and display a string and an integer.)

Q 2. Write a program to find maximum between two numbers.

(In this question, you'll learn the use of if-else condition.)

Q 3. Write a C program to check whether a number is even or odd using switch case.

(In this question, you'll apply the switch case concept.)

Practice Questions

1. Write a C program to enter two numbers and perform all arithmetic operations.
2. Write a C program to enter the radius of a circle and find its diameter, circumference and area.
3. Write a C program to check whether a number is negative, positive or zero.
4. Write a C program to check whether a year is leap year or not.
5. Write a C program to check whether a number is positive, negative or zero using switch case.
6. Write a C program to check whether an alphabet is vowel or consonant using switch case.

INPUT AND DISPLAY YOUR BASIC INFORMATIONS

1.
```
#include <stdio.h>
int main()
{
char name[20], branch[22], hobbies[50];
int regdno;
printf("Enter your name:");
scanf("%s",name);
printf("Enter your branch name:");
scanf("%s", branch);
printf("\n Enter your redg number:");
scanf("%d",& regdno);
printf("\n Enter your hobbies:");
scanf("%s", hobbies);
printf("\n My basic informations:→");
printf("%s %d %s\n", name, branch, regdno,
        hobbies);
return 0;
}
```

OUTPUT:→

```
Enter your name:Shubhra Nayak Parida
Enter your branch name:Information Technolo
Enter your redg number:036
Enter your hobbies:Reading and writing book
and doing computer coding
My basic informations:→
Shubhra Ndyak Parida
Information Technology
036
Reading and writing books and doing
computer coding.
```

MAXIMUM BETWEEN TWO NUMBERS

2.
```
# include <stdio.h>
int main()
{
int a, b;
printf("Enter any two numbers:\n");
scanf("%d %d",&a,&b);
if (a >b)
{
printf("%d is Largest \n", a);
}
else if (b>a)
{
printf("%d is Largest \n", b);
}
else
{
printf("Both equal" \n");
}
return 0;
}
```

OUTPUT: ⟶

```
Enter any two numbers:
7   14
14 is Largest
```

EVEN NUMBER AND ODD NUMBER

3.
```
#include<stdio.h>
int main()
{
int num;
printf("Enter any number: ");
scanf("%d",&num);
switch(num%2)
{
case 0:
printf("Number is even.");
break;
case 1:
printf("Number is odd");
break;
}
return 0;
}
```

OUTPUT: ⟶

```
Enter any number: 14
Number is odd
```

ALL ARITHMATIC OPERATIONS

1.
```
#include<stdio.h>
int main()
{
int num1, num2, sum, sub, mul, mod;
float div;
printf("Enter any two numbers: ");
scanf("%d %d", &num1, &num2);
sum = num1 + num2
sub = num1 - num2
mul = num1 * num2
div = num1/num
mod = num1 % num2
printf("\n Sum = %", sum, "\n Difference = %d", sub
"\n Product = %d", mul, "\n Quotient = %f", div,
"\n Modulus = %d", mod);
return 0;
}
```

OUTPUT:⟶

Enter any two numbers = 14 7
Sum = 21
Difference = 7
Product = 98
Quotient = 2.00
Modulus = 0

DIAMETER, CIRCUMFERENCE AND AREA OF A CIRCLE

2.
```
#include <stdio.h>
int main()
{
float r, d, c, a, p = 3.14;
printf("Enter the radius of the circle:");
scanf("%f", r);
d = 2 * r;
c = 2*p*r;
a = p*r*r;
printf("\n Diameter of the circle:%f", d, "\n
Circumference of the circle:%f", c, "\n Area
of the circle:%f", a);
return 0;
}
```

OUTPUT: ⟶

```
Enter the radius of the circle : 1.4
Diameter of the circle: 2.8
Circumference of the circle: 8.792
Area of the circle: 6.1544
```

NEGATIVE, POSITIVE OR ZERO NUMBER

3.
```
#include <stdio.h>
int main()
{
int num;
printf(" Enter any number: ");
scanf("%d", &num);
if (num >0)
{
printf("Number is positive ");
}
else if (num <0)
{
printf("Number is negative");
}
else if (num == 0)
{
printf("Number is zero");
}
else
{
printf ("Invalid or not a number");
}
return 0;
}
```

OUTPUT: ⟶

```
Enter any number: 49
Number is positive
```

LEAP YEAR

4.
```
#include <stdio.h>
void main()
{
int year;
printf("Enter the year :\n");
scanf("%d",&year);
if (year%400==0)
{
printf("\n%dis a leapyear \n",year);
}
else if(year%100==0)
{
printf("\n%d is not a leap year \n",year);
}
else if (year%4==0)
{
printf("\n%d is a leap year \n",year);
}
else
{
printf("\n%d is not a leapyear \n",year);
}
}
```

OUTPUT: ⟶

```
Enter the year: 2022
2022 is not a leap year.
```

POSITIVE, NEGATIVE, ZERO NUMBER USING SWITCH CASE

5.
```
#include <stdio.h>
int main()
{
int num;
printf("Enter any number=");
scanf("%d",&num);
switch(num>0)
{
case 1:
printf("%d is positive,",num);
break;
case 0:
switch(num<0)
{
case 1:
printf("%d is negative.",num);
break;
case 0:
printf("%d is zero.",num);
break;
}
break;
}
return 0;
}
```

OUTPUT: ⟶

```
Enter any number. = 70
70 is positive.
```

VOWEL OR CONSONANT ALPHABET

6.
```
#include <stdio.h>
int main()
{
char ch;
printf("Enter any alphabet=");
scanf("%c", &ch);
switch(ch)
{
case 'a':
printf("\nVowel");
break;
case 'e':
printf("\n Vowel");
break;
case 'i':
printf("\n Vowel");
break;
case 'O':
printf("\n Vowel");
break;
case 'u':
printf("\n Vowel");
break;
case 'A':
printf("\n Vowel");
break;
case 'E':
printf("\n Vowel");
break;
case 'I':
printf("\n Vowel");
break;
```

```
case 'O':
printf("\n Vowel");
break;
case 'U':
printf("\n Vowel");
break;
default:
printf("\n Consonant");
}
return 0;
}
```

OUTPUT: ⟶

Enter any alphabet = A
Vowel