

## Assignment 2

### EX1:

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

int main()
{
    int num;
    printf("Enter an integer you want to check: ");
    scanf("%d", &num);

    if(num%2 == 0)
    {
        printf("%d is even\n", num);
    }
    else
    {
        printf("%d is odd\n", num);
    }
    return 0;
}
```

### EX2:

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

int main()
{
    char num;
    printf("Enter an alphabet: ");
    scanf("%c", &num);

    switch(num)
    {
        case 'a':
        case 'A':
        case 'e':
```

```

    case 'E':
    case 'i':
    case 'I':
    case 'o':
    case 'O':
    case 'u':
    case 'U':
        printf("%c is a vowel", num);
        break;
    default:
        printf("%c is a consonant", num);

}
return 0;
}

```

### EX3:

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

```
#include <stdlib.h>
```

```
int main()
```

```

{
    float num1, num2, num3;
    printf("Enter 3 numbers: ");
    scanf("%f %f %f",&num1, &num2, &num3);

    (num1>num2&&num1>num3)?printf("largest number is:
%f",num1):((num2>num1&&num2>num3)?printf("largest number is:
%f",num2):printf("largest number is: %f",num3));
    return 0;
}

```

### EX4:

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

```
#include <stdlib.h>
```

```
int main()
```

```

{
    float num;
    printf("enter a number: ");
    scanf("%f", &num);

    if(num>0)
    {
        printf("%f is positive",num);
    }
    else if(num<0)
    {
        printf("%f is negative",num);
    }
    else
    {
        printf("you entered Zero");
    }
    return 0;
}

```

### EX5:

```

#include <stdio.h>
#include <stdlib.h>

```

```

int main()
{
    char num;

    printf("Enter a character: ");
    scanf("%c", &num);

    if((num >= 'A' && num <= 'Z') || (num >= 'a' && num <= 'z'))
    {
        printf("%c is an Alphabet", num);
    }
    else
    {

```

```
        printf("%c is not an Alphabet", num);
    }
    return 0;
}
```

#### **Ex6:**

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

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    unsigned int num, i, sum=0;
```

```
    printf("enter a number: ");
```

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

```
    for(i=1 ; i<=num ; i++)
```

```
    {
```

```
        sum += i;
```

```
    }
```

```
    printf("sum = %d", sum);
```

```
    return 0;
```

```
}
```

#### **EX7:**

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

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    int num, i, fact=1;
```

```
    printf("enter a number: ");
```

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

```
    if(num<0)
```

```
    {
```

```

        printf("Error!!! factorial of negative number doesn't exist");
    }
    else
    {
        for(i=1 ; i<=num ; i++)
        {
            fact *= i;
        }
        printf("factorial = %d", fact);
    }

    return 0;
}

```

### EX8:

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

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    float num1,num2,result;
```

```
    char op;
```

```
    printf("enter an operator (+,-,*,/): ");
```

```
    scanf("%c", &op);
```

```
    printf("enter 2 operands: ");
```

```
    scanf("%f %f", &num1, &num2);
```

```
    switch(op)
```

```
{
```

```
    case '+':
```

```
        result = num1 + num2;
```

```
        printf("%.1f %c %.1f = %.1f", num1, op, num2, result);
```

```
        break;
```

```
    case '-':
```

```
        result = num1 - num2;
```

```
        printf("%.1f %c %.1f = %.1f", num1, op, num2, result);
```

```
        break;
    case '*':
        result = num1 * num2;
        printf("%.1f %c %.1f = %.1f", num1, op, num2, result);
        break;
    case '/':
        if(num2 == 0)
        {
            printf("division by 0 is not possible!!!\n");
        }
        else
        {
            result = num1 / num2;
            printf("%.1f %c %.1f = %.1f", num1, op, num2, result);
        }
        break;
    default:
        printf("wrong operator!!!");
        break;
}

return 0;
}
```