

Extra Questions # 05

- Q1.** Write a C program to find and display the result of the following series operation, for a given **x** value. Do not forget to make data validation and also do not make any unnecessary checks. Indent the program properly.

Project Name: EQ5_1

File Name: Q1.cpp

$$-\frac{3}{(x-5)^4} + \frac{6}{(x-5)^7} - \frac{9}{(x-5)^{10}} \dots \dots \dots \frac{30}{(x-5)^{31}}$$

Example Run#1:

```
Enter x (other than 5): 5
Division by zero! Please reenter x: 5
Division by zero! Please reenter x: 3
Result: -0.2448979570
```

Example Run#2:

```
Enter x (other than 5): 5
Division by zero! Please reenter x: 26
Result: -0.0000154223
```

- Q2.** Write a C program that gets the value of the **y** and finds the result of the following series.

$$z = -\frac{2!}{\sqrt[15]{y+1}} + \frac{4!}{\sqrt[13]{y+1}} - \frac{6!}{\sqrt[11]{y+1}} + \dots - \frac{14!}{\sqrt[3]{y+1}}$$

Project Name: EQ5_2

File Name: Q2.cpp

Example Run#1:

```
Enter the value of y: -1
Enter the value of y: -1
Enter the value of y: 16

The result is -33635200233.31
```