



**Course:** CS118 - Programming Fundamentals  
**Semester:** Spring 2021

**Assignment:** 02  
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**NOTE:** Attempt all questions.

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## Submission

Write down the code on paper (your code must be well indented), scan your code using a software like camscanner, make pdf file and submit it on slate.

1. Write a function in python to find the even or odd divisors (factors) of a number and print them. The function must have two parameters: the first parameter should be the number whose divisors are to be found, the second parameter is a boolean value which when True the function will print the even divisors and when False it will print the odd divisors.
2. Using a while loop find and print the square roots of the first 25 odd positive integers.
3. Write a function that takes one parameter and return Boolean value true if a passed parameter is arm strong number else return false. Do it using both loops (for and while )

Armstrong number:

Armstrong number is a number that is equal to the sum of cubes of its digits. For example, 0, 1, 153, 370, 371 and 407 are the Armstrong numbers. Let's try to understand why 153 is an Armstrong number.

$$153 = (1*1*1) + (5*5*5) + (3*3*3)$$

where:

$$(1*1*1)=1$$

$$(5*5*5)=125$$

$$(3*3*3)=27$$

So:

$$1+125+27=153$$

4. Write a function that takes 2 input (how many tables to be displayed and range of table)

Consider the following code and modified to get the desired output

```
def table(no_table,range_table):
```

```
    #code here
```

```
    return
```

expected output:

```
no_table=2
```

```
range_table=5
```

$$1 \times 1 = 1$$

$$1 \times 2 = 2$$

$$1 \times 3 = 3$$

$$1 \times 4 = 4$$

$$1 \times 5 = 5$$

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

$$2 \times 5 = 10$$