

Madhav Institute of Technology and Science, Gwalior-474005

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

DEPARTMENT OF INFORMATION TECHNOLOGY



FINISHING SCHOOL PROGRAM (Online Internship) - 2021

DATA SCIENCE FOR BEGINNERS

ASSIGNMENT-2

SUBMITTED TO:

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IT 3RD Year (6TH Sem)

Q.1

TRY IT YOURSELF

Write a function that accepts length and breadth of rectangle as arguments, and calculate **Area** and **Perimeter** of that rectangle.

CODE:-

```
print('NEERAJ GOPAL VERMA-0901IT181038') #user details

def rect(l,b):
    area = l*b
    perimeter = 2*(l+b)
    print("\nArea of rectangle : " + str(area))
    print("Perimeter of rectangle : " + str(perimeter))

rect(4,5)
```

OUTPUT:-

```
➜ NEERAJ GOPAL VERMA-0901IT181038

Area of rectangle : 20
Perimeter of rectangle : 18
```

Q.2

TRY IT YOURSELF

Reverse the order of list of your choice

You can reverse the order by just:

```
variable_name.reverse()
```

CODE:-

```
print('NEERAJ GOPAL VERMA-0901IT181038\n') #user details
```

```
space = ['ISRO','NASA','ISS']
```

```
space.reverse()
```

```
print(space)
```

OUTPUT:-

```
NEERAJ GOPAL VERMA-0901IT181038
```

```
['ISS', 'NASA', 'ISRO']
```

Q.3

TRY IT YOURSELF

Make a list of cubes between numbers 1-30

CODE:-

```
print('NEERAJ GOPAL VERMA-0901IT181038\n') #user details

squares = [x**3 for x in range(1,4)]
print(squares)
```

OUTPUT:-

```
➤ NEERAJ GOPAL VERMA-0901IT181038

[1, 8, 27]
```

Q.4

TRY IT YOURSELF

Generate random even numbers between 0-50 (both 0 and 50 are inclusive) and print then sort and print

CODE:-

```
import random

print('NEERAJ GOPAL VERMA-0901IT181038\n') #user details

mylist = []

for i in range(0,5):
    x = random.randrange(0,50,2)
    mylist.append(x)

print(mylist)
mylist.sort()
print(mylist)
```

OUTPUT:-

```
NEERAJ GOPAL VERMA-0901IT181038
```

```
[16, 28, 20, 48, 30]
[16, 20, 28, 30, 48]
```

Q.5

TRY IT YOURSELF

Create a program of inheritance of your choice

CODE:-

```
print('NEERAJ GOPAL VERMA-0901IT181038\n') #user details

class Father:
    def __init__(self, fname, lname):
        self.firstname = fname
        self.lastname = lname

p = Father("Gopal", "Verma")
print(p.firstname + ' ' + p.lastname)

class Son(Person):
    pass

s = Student("Neeraj", "Verma")
print(s.firstname + ' ' + s.lastname)
```

OUTPUT:-

```
NEERAJ GOPAL VERMA-0901IT181038
```

```
Gopal Verma
Neeraj Verma
```

Q.6 In the last example of exceptions

TRY IT YOURSELF

what if a user press an alphabet other than 'q'
how you can handle this situation?

CODE:-

```
print('NEERAJ GOPAL VERMA-0901IT181038\n') #user details
fn = "
sn = "
print("\nEnter two number to divide.\nEnter 'q' to quit.")
```

while True:

try:

fn = int(input("First Number "))

sn = int(input("Second Number "))

result = fn/sn

print(f"Answer: {result}")

except ValueError:

if fn == 'q' or sn == 'q':

print("Thank you!")

break

print("\nEnter numeric values or 'q' only, nothing else allowed.")

except ZeroDivisionError:

print("\nYou can't divide by Zero, Sorry!")

OUTPUT:-

```
NEERAJ GOPAL VERMA-0901IT181038
```

```
Enter two number to divide.
```

```
Enter 'q' to quit.
```

```
First Number a
```

```
Enter numeric values or 'q' only, nothing else allowed.
```