Lab 1

```
# 1.1
name=input("Enter Your Name: ")
age=input("Enter Your Age: ")
fav_num=input("Enter Your Favourite nubmer: ")
print("Your Name is "+name+". You are "+ age+ " years old. Your Favourite number is "+ fav
     Enter Your Name: Sneha
     Enter Your Age: 22
     Enter Your Favourite nubmer: 4
     Your Name is Sneha. You are 22 years old. Your Favourite number is 4
# 1.2
length=int(input("Enter length of rectangle: "))
width=int(input("Enter width of rectangle: "))
area=length*width
print("Area of rectangle is: ")
print(area)
     Enter length of rectangle: 100
     Enter width of rectangle: 5
     Area of rectangle is:
     500
# 1.3
weight=int(input("Enter your weight (in kg): "))
height=int(input("Enter your height (in m): "))
var_BMI=weight/(height^2)
print("Your BMI is: ")
print(var_BMI)
     Enter your weight (in kg): 50
     Enter your height (in m): 1
     Your BMI is:
     16.666666666668
```

```
set_ops={"Sneha","Ashish","Kirthana"}
set_ops1={"Kirthana","Shubham"}
print(set_ops.union(set_ops1))
print(set_ops.intersection(set_ops1))
print(set_ops.difference(set_ops1))
     {'Sneha', 'Kirthana', 'Ashish', 'Shubham'}
     {'Kirthana'}
     {'Sneha', 'Ashish'}
# 1.5
a_dict={"Name":"Sneha",
        "Marks1":45,
        "Marks2":50,}
print(a_dict)
print(a_dict['Name'])
     {'Name': 'Sneha', 'Marks1': 45, 'Marks2': 50}
     Sneha
```

```
# 2.1
var_age=int(input("Enter Your Age: "))
if var_age > 18:
  if var_age >60:
    print("Senior")
  else:
    print("Adult")
else:
  print("Minor")
     Enter Your Age: 17
     Minor
# 2.2
a=1
while a<=10:
  print(a)
  a+=1
     1
     2
```

```
#2.3
```

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```
a=1
while a<10:
   if a==5:
      continue
print(a)
   a+=1</pre>
```

.....

Traceback (most recent call last)

```
4 while a<10:

5 if a==5:

---> 6 continue

7 else:

8 print(a)
```

KeyboardInterrupt:

SEARCH STACK OVERFLOW

2.4

```
for a in range(1,50):
   if(a%2==0):
     print(a)
```

2 4

6

8

10

2.5

```
#3.1

def add_func(a,b):
    c=a+b
    return c

a=10
b=5
sum=add_func(a,b)
print(sum)

15
```

```
# 3.2
def avg_of_list(list_a):
  sum=0
  n=len(list_a)
  for v in list_a:
    sum=sum+v
  return(sum/n)
a=[2,3,4]
avg=avg_of_list(a)
print(avg)
     3.0
# 3.3
def func_vowel(abc):
# 3.4
a=datetime()
print(a)
                                                Traceback (most recent call last)
     NameError
     <ipython-input-41-0568f7f0ce54> in <cell line: 3>()
           1 # 3.4
     ----> 3 a=date.datetime()
           4 print(a)
     NameError: name 'date' is not defined
      SEARCH STACK OVERFLOW
```

```
# 4.1
try:
  a=10
  b="abc"
  add=a+b
  print(add)
except:
  print("non int values cannot be added")
     15
# 4.2
try:
  a=int(input("Enter a number: "))
except ValueError:
  print("Please check the value")
     Enter a numbera
     Please check the value
# 4.3
try:
  a=10
  b=0
  print(a/b)
except ZeroDivisionError:
  print("Cannot divide by zero")
     Cannot divide by zero
# 4.4
try:
  my_file=open(abc.txt,'r')
except:
  print("File does not exist. Please create one!")
     File does not exist. Please create one!
```

```
# 5.1
my_file=open('myfile.txt','w')
my_file.writelines("Hello, Python!")
# 5.2
my_file=open('/content/myfile.txt','r')
print(my_file.read())
     Hello, Python!
# 5.3
my_file=open('/content/myfile.txt','a')
my_file.writelines("\n This is from the file")
my_file.close()
my_file=open('/content/myfile.txt','r')
print(my_file.read())
     Hello, Python! This is from the file
      This is from the file
# 5.4
my_file=open('/content/myfile.txt','r')
nrint(mv file.read())
```