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# Display Menu-> for user
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Below created is function which user defined function.

here we are achieving a menu which user going to see when program get started

here to define function -keyword -def to be used

& we defined to function display_menu()

synatx:

```
def function_name():
```

```
    function_body
```

indentation to write function_body to be taken care of, which can be seen below.

i have created 7 selections which will do airthmetic operations & last select to break/exit out of program.

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'''
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```
def display_menu():
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```
    print("--- Welcome to the Simple Calculator ---")
```

```
    print("--> Select 1 for Addition")
```

```
    print("--> Select 2 for Subtraction")
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    print("--> Select 3 for Multiplication")
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    print("--> Select 4 for Division")
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```
    print("--> Select 5 for Power")
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```
    print("--> Select 6 for True Quotient")
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```
    print("--> Select 7 for Remainder")
```

```
    print("--> Select 8 for Exit")
```

```
# User choice->
```

```
'''
```

to achieve this we have created function name "get_choice()" with while loop & with boolean condition.

also we have handled exception which can occur while handling user choice at the output end , if use enter invalid input such as if user enter letter "one" instead of 1 digit then error will occur & we wont be able process further.

so to handle this first we have to check which error comes when user enter word.

```
# Testing for calculator project
```

```
choice = int(input("Enter your choice (1/2/3/4/5/6/7/8): "))
```

```
while choice>=1 and choice<=8:
```

```
    print("Correct choice")
```

hence to handle this logical error we have used exception method, which is try-except-finally

also to select between 1 to 8 choice- we have used logical operator here that is and operator, if both i/p's turn 1 or true it will process further

here return is keyword which will hold the result but wont display at the output, which can used later if we want.

```
'''
```

```

def get_choice():
    while True:
        try:
            choice = int(input("Enter your choice (1/2/3/4/5/6/7/8): "))

            if choice >= 1 and choice <= 8: #Logical operator- and logic - it will see if both choice
condition turn out be true then only it will process choice & hold value but wont display it
due return statement written

                return choice

            else:
                print("Invalid choice, Please select a choice number between 1 to 8!!.")

        except ValueError:      #ValueError: Logical error-if exception error (logical error)
has any spelling mistake in wont work,hence before putting test it
            print("Select choice in digit format only!")

```

Get two numbers from user->

'''

here to achieve, getting 2 numbers from user we have created an
function with while loop & boolean true condition, which we mentioned
as a True which execute the try-except-finally exception loop.

where

try : is holding logic which will accept user 2 inputs n1,n2
and hold n1,n2

where

except followed by error names, here we have taken care of 2 errors.
will get handled if occur.

'''

```
def get_numbers():  
    while True:  
        try:  
            n1 = float(input("Enter Number 1: "))  
            n2 = float(input("Enter Number 2: "))  
            return n1,n2  
        except ZeroDivisionError: # if exception error (logical error) has any spelling mistake  
            in wont work,hence before putting test it  
                print("Denominator can not be Zero!")  
        except ValueError: # if exception error (logical error) has any spelling mistake in  
            wont work,hence before putting test it  
                print("Enter number in digit format only!")
```