Solution for Simple Calculator.

Here is the Python program for the Simple Calculator, which demonstrates basic Python concepts.

```
def calculator():
  num1 = float(input("Enter the first number: "))
  num2 = float(input("Enter the second number: "))
  operator = input("Enter the operator (+, -, *, /): ")
  if operator == '+':
     result = num1 + num2
  elif operator == '-':
     result = num1 - num2
  elif operator == '*':
     result = num1 * num2
  elif operator == '/':
     if num2 == 0:
        print("Error: Division by zero")
        return
     else:
        result = num1 / num2
  else:
     print("Invalid operator")
     return
  print("Result:", result)
calculator()
```

Sample Output:-

1. Enter the first number: 5

Enter the second number: 9

Enter the operator (+, -, *, /): *

Result: 45.0

2. Enter the first number: 65

Enter the second number: 0

Enter the operator (+, -, *, /): /

ERROR!

Error: Division by zero

Explanation:

- 1. User Input: The program prompts the user to enter two numbers and an operator.
- 2. Operation Selection: The if-elif-else statements determine the chosen operation based on the input operator.
- 3. Calculation: The appropriate arithmetic operation is performed using the specified operator.
- 4. Error Handling: If necessary, the code checks for division by zero and displays an error message.
- 5. Output: The calculated result is printed to the console.