Basic Python Programs

1. Print Your Name and Age

```
name = "Alice"
age = 25
print("Name:", name)
print("Age:", age)
```

2. Add Two Numbers Entered by User

```
a = int(input("Enter first number: "))
b = int(input("Enter second number: "))
print("Sum:", a + b)
```

3. Swap Two Variables

```
x = 5
y = 10
x, y = y, x
print("x:", x, "y:", y)
```

4. Find the Largest of Three Numbers

```
a, b, c = 10, 20, 15
largest = max(a, b, c)
print("Largest number is", largest)
```

5. Check Even or Odd

```
num = int(input("Enter a number: "))
if num % 2 == 0:
    print("Even")
else:
    print("Odd")
```

6. Check if a Number is Prime

```
num = 29
```

```
if num > 1:
    for i in range(2, num):
        if (num % i) == 0:
            print(num, "is not prime")
            break
    else:
        print(num, "is prime")
else:
    print(num, "is not prime")
```

7. Print All Prime Numbers in a Range

```
for num in range(10, 50):
    if num > 1:
        for i in range(2, num):
            if (num % i) == 0:
                 break
        else:
            print(num, end=' ')
```

8. Count Vowels in a String

```
s = "Hello World"

vowels = "aeiouAEIOU"

count = sum(1 for char in s if char in vowels)

print("Vowel count:", count)
```

9. Reverse a String

```
s = "Python"
print("Reversed:", s[::-1])
```

10. Demonstrate split() and strip()

```
text = " Hello Python World "
print(text.strip())
words = text.strip().split()
print(words)
```