

Exercises

- 1) Calculate the natural logarithm of a number.
- 2) Calculate the base 10 logarithm of a number.
- 3) Calculate the exponential function of a number.
- 4) Calculate the power of a number to a given exponent.
- 5) Calculate the arc cosine of a number.
- 6) Calculate the arc sine of a number.
- 7) Calculate the arc tangent of a number.
- 8) using math and python for beginner
- 9) Calculate the hyperbolic sine of a number.
- 10) Calculate the hyperbolic tangent of a number.

Exercises and solution

- 1) Calculate the natural logarithm of a number.

```
import math

num = 10
ln_value = math.log(num)

print(ln_value)
```

- 2) Calculate the base 10 logarithm of a number.

```
import math

num = 100
log_value = math.log10(num)

print(log_value)
```

- 3) Calculate the exponential function of a number.

```
import math

num = 2
exp_value = math.exp(num)

print(exp_value)
```

- 4) Calculate the power of a number to a given exponent.

```
import math

num = 2
exponent = 3
```

```
power_value = math.pow(num, exponent)
```

```
print(power_value)
```

5) Calculate the arc cosine of a number.

```
import math
```

```
num = 0.5
```

```
acos_value = math.acos(num)
```

```
print(acos_value)
```

6) Calculate the arc sine of a number.

```
import math
```

```
num = 0.5
```

```
asin_value = math.asin(num)
```

```
print(asin_value)
```

7) Calculate the arc tangent of a number.

```
import math
```

```
num = 1
```

```
atan_value = math.atan(num)
```

```
print(atan_value)
```

8) Calculate the hyperbolic sine of a number.

```
import math
```

```
num = 2
```

```
sinh_value = math.sinh(num)
```

```
print(sinh_value)
```

9) Calculate the hyperbolic cosine of a number.

```
import math
```

```
num = 2
```

```
cosh_value = math.cosh(num)
```

```
print(cosh_value)
```

10) Calculate the hyperbolic tangent of a number.

```
import math
```

```
num = 2
```

```
tanh_value = math.tanh(num)
```

```
print(tanh_value)
```