

# Quantum Now

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## 1 Introduction

Something, something.

## 2 Python Functions

More something, more something

### 2.1 Modulus Function

At Python function

### **2.1.1 Mathematics**

Some some

### **2.1.2 Pseudocode**

Some

### **2.1.3 Code**

Some some some

## **2.2 Absolute Value Function**

This function is made to accept any real number and return the positive value if it is not already.

### **2.2.1 Mathematics**

Let  $A$  be a real number, the absolute value of  $A$  is  $A$  been a positive number.

### **2.2.2 Pseudocode**

If  $A < 0$ : multiply  $A$  by  $-1$  and return the result. If  $A \geq 0$ : return  $A$  as it is.

### **2.2.3 Python Code**

```
DO i=1,5
print*, 'Do something'
END DO
```

### **2.2.4 Fortran Code**

## **2.3 Modulus Function**

At Python function

## **2.4 Division Function**

At Python function

## **2.5 Sine/Cosine Function**

At Python function

## **2.6 Square root Function**

In Sec. 2.4 the division algorithm was fully described but we encourage you to review that section as we would be using that algorithm in this function.

### **3    Array Functions**

More more something, more more something

### **4    Applications**

More more more something, more more more something