C Language Tutorial

(Basic to Advanced)

Topics to be covered :

Variables, Data Types + Input/Output

(Chapter 1)

1. **First Program**

```c
#include<stdio.h>


int main() {
   printf("Hello World");
   return 0;
}
```

2. **Variables & Data Types + Constants & Keywords**

```c
#include<stdio.h>


int main() {
   int number;
   int age;
   int price;
   return 0;
}
```

```c
#include<stdio.h>

int main() {
   int age = 22;
   float pi = 3.14;
   char percentage = '%';
   return 0;
}
```

3. **Comments**

```c
#include<stdio.h>
//This program prints Hello World
int main() {
   printf("Hello World");
   return 0;
}
```

4. **Output**

```c
#include<stdio.h>

int main() {
   int age = 22;
   float pi = 3.14;
   char percentage = '%';


   printf("age is %d", age);
   printf("age is %f", pi);
   printf("age is %c", percentage);
   return 0;
}
```

5. **Input (Sum of 2 numbers)**

```c
#include<stdio.h>

int main() {
   int a, b;

   printf("enter a \n");
   scanf("%d", &a);

   printf("enter b \n");
```

```
   scanf("%d", &b);

   printf("sum of a & b is : %d \n", a+b);

   return 0;
}
```

6. **Practice Qs 1 (Area of Square)**

```
#include<stdio.h>
//area of square
int main() {
   int side;
   scanf("%d", &side);
   printf("%d", side * side);
   return 0;
}
```

7. **Practice Qs 2 (Area of Circle)**

```
#include<stdio.h>
//area of square
int main() {
   float radius;
   scanf("%f", &radius);
   printf("%f", 3.14 * radius * radius);
   return 0;
}
```