

2/4/19

Why C?

other C++ Python, Perl Java, C#
Assembly

Is C obsolete?

Is a spoon obsolete?

C created by Brian ~~Kern~~ Kernagan
and Dennis Richie at Bell Labs

```
// Comment starts with two slashes
// Should put name, date, what your program does
// Revision history
// Sources used
/* a multi
line
comment */
```

```
#include <stdio.h>
int main()
{
    int p, n; // p is principle
              // n is number years
    double r, si; // r r is rate { } frame a
                  // si is simple interest block of
                  code
    Rewrite next
}
```

Type of return value →

← space

"main" routine must be spelled m, a, i, n

```
#include <stdio.h>
```

```
int main()
```

```
{  
    int p, n; // p is principle, n is num years
```

```
    double r, si; // r is rate, si is simple  
                    interest
```

```
    p = 1000; // assign 1000 to location p
```

```
    r = 5.0; // 5% interest rate
```

```
    n = 3; // 3 years
```

```
    si = p * n * r / 100; // calc interest
```

```
    printf("%lf", si);
```

data type

variable to print

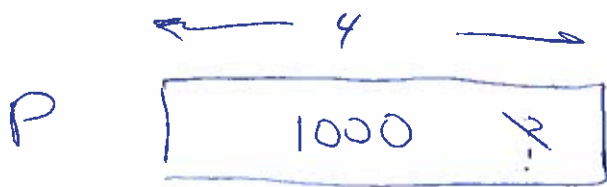
part
of
program

int %d (decimal int)

float %f

double %lf (long float)

```
}
```



Destructive write



non-destructive read



150.000000

doubles and floats print 6 decimal places by default

```
#include <stdio.h> #define
int main() #define _CRT_SECURE_NO_WARNINGS
{
    int p, n;
    double r, si;
    printf("Enter principle: ");
    scanf("%d", &p);
    printf("Enter number of years: ");
    scanf("number" "%d", &n);
    printf("rate" "Enter rate: ");
    scanf("%lf", &r);
    si = p * n * r / 100;
    printf("Simple interest is %lf", si);
    return 0;
}
```

name of var
preceeded by &
data type

WARNINGS