

CS101: Introduction to Computing

and

CS110: Computing Laboratory

8th January, 2019

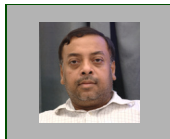
Instructors

CS101 : Introduction to Computing

Before Mid Semester



Prof. Aryabartta Sahu



Prof. Pinaki Mitra

After Mid Semester



Prof. Deepanjan Kesh



Prof. Benny George K.

CS110 : Computing Laboratory



Prof. V. Vijaya Saradhi

Attendance

Attendance

- ▶ 75% attendance is compulsory.

Attendance

- ▶ 75% attendance is compulsory.
- ▶ Below 75% \implies F Grade.

Attendance

- ▶ 75% attendance is compulsory.
- ▶ Below 75% \implies F Grade.
- ▶ What about 74%?

Attendance

- ▶ 75% attendance is compulsory.
- ▶ Below 75% \implies F Grade.
- ▶ What about 74%?
 - ▶ Should I be punished for 1%?

Attendance

- ▶ 75% attendance is compulsory.
- ▶ Below 75% \implies F Grade.
- ▶ What about 74%?
 - ▶ Should I be punished for 1%?
 - ▶ Short answer : Yes.

Attendance

- ▶ 75% attendance is compulsory.
- ▶ Below 75% \implies F Grade.
- ▶ What about 74%?
 - ▶ Should I be punished for 1%?
 - ▶ Short answer : Yes.
 - ▶ Long answer : You have missed 26%.

Attendance

- ▶ 75% attendance is compulsory.
- ▶ Below 75% \implies F Grade.
- ▶ What about 74%?
 - ▶ Should I be punished for 1%?
 - ▶ Short answer : Yes.
 - ▶ Long answer : You have missed 26%.

Examinations

Attendance

- ▶ 75% attendance is compulsory.
- ▶ Below 75% \implies F Grade.
- ▶ What about 74%?
 - ▶ Should I be punished for 1%?
 - ▶ Short answer : Yes.
 - ▶ Long answer : You have missed 26%.

Examinations

- ▶ Mid Semester : 40%.

Attendance

- ▶ 75% attendance is compulsory.
- ▶ Below 75% \implies F Grade.
- ▶ What about 74%?
 - ▶ Should I be punished for 1%?
 - ▶ Short answer : Yes.
 - ▶ Long answer : You have missed 26%.

Examinations

- ▶ Mid Semester : 40%.
- ▶ End Semester : 60%.

Attendance

- ▶ 75% attendance is compulsory.
- ▶ Below 75% \implies F Grade.
- ▶ What about 74%?
 - ▶ Should I be punished for 1%?
 - ▶ Short answer : Yes.
 - ▶ Long answer : You have missed 26%.

Examinations

- ▶ Mid Semester : 40%.
- ▶ End Semester : 60%.
- ▶ Pass Marks : 30%.

Attendance

- ▶ 75% attendance is compulsory.
- ▶ Below 75% \implies F Grade.
- ▶ What about 74%?
 - ▶ Should I be punished for 1%?
 - ▶ Short answer : Yes.
 - ▶ Long answer : You have missed 26%.

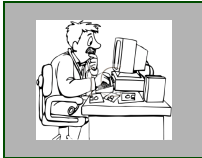
Examinations

- ▶ Mid Semester : 40%.
- ▶ End Semester : 60%.
- ▶ Pass Marks : 30%.
- ▶ Grading policy : Relative.

Contents

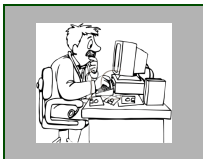
Contents

How to interact with a computer?



Contents

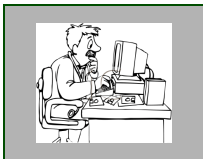
How to interact with a computer?



To tell a computer what to do

Contents

How to interact with a computer?

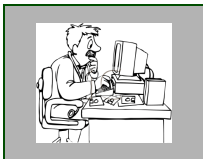


To tell a computer what to do

- How to do it?

Contents

How to interact with a computer?

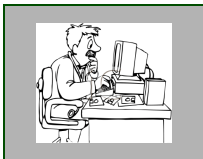


To tell a computer what to do

- How to do it? → Programming.

Contents

How to interact with a computer?

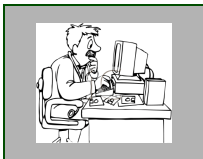


To tell a computer what to do

- ▶ How to do it? → Programming.
- ▶ .. efficiently?

Contents

How to interact with a computer?

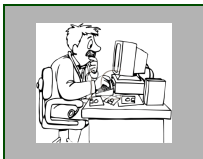


To tell a computer what to do

- ▶ How to do it? → Programming.
- ▶ .. efficiently? → Computing.

Contents

How to interact with a computer?



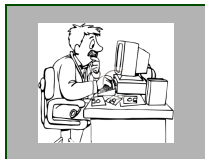
To tell a computer what to do

- ▶ How to do it? → Programming.
- ▶ .. efficiently? → Computing.

How a computer does it?

Contents

How to interact with a computer?



To tell a computer what to do

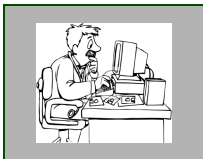
- ▶ How to do it? → Programming.
- ▶ .. efficiently? → Computing.

How a computer does it?

- ▶ Hardware.

Contents

How to interact with a computer?



To tell a computer what to do

- ▶ How to do it? → Programming.
- ▶ .. efficiently? → Computing.

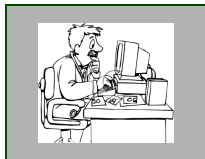
How a computer does it?

- ▶ Hardware.

Books

Contents

How to interact with a computer?



To tell a computer what to do

- ▶ How to do it? → Programming.
- ▶ .. efficiently? → Computing.

How a computer does it?

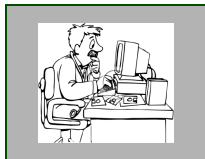
- ▶ Hardware.

Books

- ▶ *A Book on C* by A Kelly and I Pohl.

Contents

How to interact with a computer?



To tell a computer what to do

- ▶ How to do it? → Programming.
- ▶ .. efficiently? → Computing.

How a computer does it?

- ▶ Hardware.

Books

- ▶ *A Book on C* by A Kelly and I Pohl.
- ▶ *Data Structures Using C* by A M Tenenbaum, Y Langsam and M J Augenstein.

First Programs

Print “Hello, world!”

First Programs

```
Print "Hello, world!"
```

```
Hello, world!
```

First Programs

Print "Hello, world!"

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

```
int main(void)
```

```
{
```

```
    printf("Hello, world!");
```

```
    return 0;
```

```
}
```

First Programs

Print "Hello, world!"

```
#include <stdio.h>
int main(void)
{
    printf("Hello, world!");
    return 0;
}
```

Add two numbers

First Programs

Print "Hello, world!"

```
#include <stdio.h>
int main(void)
{
    printf("Hello, world!");
    return 0;
}
```

Add two numbers

3 + 4

First Programs

Print "Hello, world!"

```
#include <stdio.h>
int main(void)
{
    printf("Hello, world!");
    return 0;
}
```

Add two numbers

```
#include <stdio.h>
int main(void)
{
    printf("%d", 3 + 4);
    return 0;
}
```


First Programs

Print "Hello, world!"

```
#include <stdio.h>
int main(void)
{
    printf("Hello, world!");
    return 0;
}
```

Why such a strange dialect?

Add two numbers

```
#include <stdio.h>
int main(void)
{
    printf("%d", 3 + 4);
    return 0;
}
```

First Programs

Print "Hello, world!"

```
#include <stdio.h>
int main(void)
{
    printf("Hello, world!");
    return 0;
}
```

Add two numbers

```
#include <stdio.h>
int main(void)
{
    printf("%d", 3 + 4);
    return 0;
}
```

Why such a strange dialect?

- ▶ You have to specify every single detail.

First Programs

Print "Hello, world!"

```
#include <stdio.h>
int main(void)
{
    printf("Hello, world!");
    return 0;
}
```

Add two numbers

```
#include <stdio.h>
int main(void)
{
    printf("%d", 3 + 4);
    return 0;
}
```

Why such a strange dialect?

- ▶ You have to specify every single detail.
- ▶ That is what you are here to learn.

Advice

Advice

Do's

Dont's

Advice

Do's

- ▶ Tread on the tried and tested path.

Dont's

Advice

Do's

- ▶ Tread on the tried and tested path.
- ▶ Work hard.

Dont's

Advice

Do's

- ▶ Tread on the tried and tested path.
- ▶ Work hard.

Dont's

- ▶ “There are no shortcuts to any place worth going.”