



Faculty of Computing

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Subject: Computer Architecture

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Lab Task

Task 1:

START:

INP

OUT

CLA

OUT

HLT

Name	Width	Data			
AC	16	0000	0000	1010	1010
AR	12	0000	0000	0001	

Name	Width	Data			
AC	16	0000	0000	0000	0000

Task 2:

START:

INP

OUT

CMA

OUT

HLT

Name	Width	Data			
AC	16	0000	0000	1100	1100
AR	12	0000	0000	0001	

```
EXECUTING...
Enter Inputs, the first of which must be an Integer: 204
```

Name	Width	Data			
AC	16	1111	1111	0011	0011

Task 3:

INP

INC

INC

INC

OUT

HLT

```
EXECUTING...
Enter Inputs, the first of which must be an Integer: 1
Output: 4
EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]
```

Task 4:

INP

SPA

OUT

HLT

```
EXECUTING...
Enter Inputs, the first of which must be an Integer:5
EXECUTION HALTED DUE TO AN EXCEPTION: There are currently no predefined inputs from the user of type long.
```

```
EXECUTING...
Enter Inputs, the first of which must be an Integer: -5
Output: -8191
EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]
```

Task 5:

INP

SNA

OUT

HLT

Computer Architecture

```
EXECUTING...
```

```
Enter Inputs, the first of which must be an Integer: -5
```

```
Output: 0
```

```
EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]
```

```
EXECUTING...
```

```
Enter Inputs, the first of which must be an Integer: -4
```

```
EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]
```