

# OFFLINE for A1

Write an assembly program that shows the summation of the first **n** numbers of the following series as output

$$1 + 2 + 4 + 8 + 16 + 32 + \dots$$

## Sample Execution:

Enter the value of n: **10**

Summation of the series is: **1023**

Enter the value of n: **08**

Summation of the series is: **0255**

## Marks Distribution:

Input (Always 2 digit)	2
Correct Summation Calculation	5
Output (Always 4 digit)	3

***Warning:** You are not allowed to use `DIV`, `IDIV`, `MUL`, `IMUL` instructions. You have to use console input for taking input and console output for showing output. Last but not the least, **please do not copy.***

## OFFLINE for A2

Write an assembly program that takes two nonnegative numbers of size as input. It then divides the first number with the second number and displays the quotient and remainder of the division. After that, it divides the second number with the first number and displays the quotient and remainder of the division.

### Sample Execution:

Enter the First Number: 014

Enter the Second Number: 005

Quotient of the 014 / 005 division is: 002

Remainder of the 014 / 005 division is: 004

Quotient of the 005 / 014 division is: 000

Remainder of the 005 / 014 division is: 005

### Marks Distribution:

Input (Always 3 digit)	2.5
Correct Quotient + Remainder Calculation	2.5+2.5=5
Output (Always 3 digit)	2.5

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## OFFLINE for B1

Cricket is one of the most popular games in the world and one of the biggest event of cricket, ICC World Twenty20 2016 is currently going on. Assume in one match of the ICC World Twenty20, a team batting first has scored given runs in their 20 overs. In the innings break, your friends ask you to predict whether the team will win or not. Being intelligent, you know that there is a website where that team winning ratio for a range of run batting first in a twenty over match can be found. Now write an assembly program that will take the team score as input and predicts whether the team has a greater chance of winning or not according to the following table found in that website.

Team	Run Range	Winning Percentage
BNGLD	200-Above	100
	170-199	90
	150-169	70
	120-149	45
	101-119	25
	Below 100	15

### Sample Execution:

Enter the Score team obtained batting first: **200**

My Prediction: **VICTORY**

Enter the Score team obtained batting first: **098**

My Prediction: **DEFEAT**

### Marks Distribution:

Input (Always 3 digit)	3
Correct Prediction	5
Output	2

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## OFFLINE for B2

Write an assembly program for grade points calculation of a given mark provided by a user. User gives an input ranges from 0 to 100. Your program should give the corresponding grade point as output. Use the following table in your code for grade point calculation.

Range	Grade Points
90 - 100	4.00
80 - 89	3.50
70 - 79	3.00
60 - 69	2.50
50 - 59	2.00
0 - 49	0.00

### Sample Execution:

Enter your mark: 081

Grade You Obtained: 3.5

Enter your mark: 100

Grade You Obtained: 4.0

### Marks Distribution:

Input (Always 3 digit)	2.5
Correct grade point calculation	5
Output	2.5

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