# PHYSICS WALLA PROBLEM ON CPP LOOPS-2 ASSIGNMENT SOLUTIONS

Q1 - Write a program to calculate the factorial of a number.

### Output: -

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Nerning: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for compatibility purposes. If you went to re-emable it, run 'Import-rodule PSReadLine'.

PS DIVIS Code of "drivis Code*(C++\" | if ($7) ( g++ Loope1.cpp -a Loope1 ) | if ($7) { \linesi3} {
Enter a number: 4
PS-DIVIS Code*(C++\ ci 'drivis Code*(C++\" ) if ($7) ( g++ Loope1.cpp -a Loope1 ) | if ($7) { \linesi3} {
Enter a number: 47
PS-DIVIS Code*(C++\ ci 'drivis Code*(C++\" ) if ($7) ( g++ Loope1.cpp -a Loope1 ) | if ($7) { \linesi3} {
Enter a number: 47
PS-DIVIS Code*(C++\ ci 'drivis Code*(C++\" ) if ($7) ( g++ Loope1.cpp -a Loope1 ) | if ($7) { \linesi3} {
Enter a number: 47
PS-DIVIS Code*(C++\ ci 'drivis Code*(C++\" ) if ($7) ( g++ Loope1.cpp -a Loope1 ) | if ($7) { \linesi3} {
Enter a number: 19
PS-DIVIS Code*(C++\ ci 'drivis Code*(C++\" ) if ($7) ( g++ Loope1.cpp -a Loope1 ) | if ($7) { \linesi3} {
Enter a number: 19
PS-DIVIS Code*(C++\ ci 'drivis Code*(C++\ ci ') | if ($7) ( g++ Loope1.cpp -a Loope1 ) | if ($7) ( \linesi3) {
Enter a number: 19
PS-DIVIS Code*(C++\ ci 'drivis Code*(C++\ ci ') | if ($7) ( g++ Loope1.cpp -a Loope1 ) | if ($7) ( \linesi3) {
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Enter a number: 19
PS-DIVIS Code*(C++\ ci ') | if ($7) ( \linesi3) {
Enter a number: 19
Ent
```

Q2 - Write a program to print all Armstrong numbers between 100 to 500.

### Output: -

```
Marning: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for compatibility purposes. If you want to re-enable it, run 'Impart-Poolule PSReadLine'.

PS D:\VS Code> cd "d:\VS Code>(C++)" ; If ($?) { g++ Loops2.cpp -o Loops2 } ; If ($?) { \Loops2 }

Armstrong numbers between 369 to 560 are: 153 379 373 407
PS D:\VS Code>(C++)
```

Q3 - Write a program to find the sum of n natural numbers.

### Output: -

```
Warning: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for compatibility purposes. If you want to re-enable it, run 'Import-recolar PSReadLine'.

PS D:\\YS Code> cd '%:\YS Code\(C++\''; if ($?) { g++ Loops3.cpp -o Loops3 }; if ($?) { .\Loops3 }
Enter a positive integer: 4

PS D:\\YS Code\(C+-> cd '%:\YS Code\(C++\''; if ($?) { g++ Loops3.cpp -o Loops3 }; if ($?) { .\Loops3 }

Enter a positive integer: 5

Enter a positive integer: 4

E
```

Q4 - Write a program to reverse a given integer number.

### Output: -

```
| Northing: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for compatibility purposes. If you want to re-enable it, run 'Import-Module PSReadLine'.

PS D:\\S Code\ cd 'd:\\S Code\C++\' ; if ($?) { g++ Loops4.cpp -o Loops4 } ; if ($?) { .\Loops4 } Enter an integer: 27222084
| Reversed Number + 48822171
| PS D:\\S Code\C++\' ; if ($?) { g++ Loops4.cpp -o Loops4 } ; if ($?) { .\Loops4 } Enter an integer: 13811999
| Reversed Number = 99911831
| PS D:\\S Code\C++\ |
```

Q5 - Write a program to print the cross pattern given below (in the shape of X)

## Output: -

```
Marriag: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for competibility purposes. If you want to re-enable it, run "Imp ont-Module PSReadLine".

PS D:\VS Codes of "d:\VS Code\C+\\"; if ($7) { g++ LoopsS.cpp -o LoopsS }; if ($7) { .\LoopsS } inter the number of rows: 17

PS D:\VS Code\C+> ■
```

### Q6- Write a program to print alphabet diamond pattern

### Output: -

```
TERMINAL
Enter the size of the diamond: 17
        A
        888
       CCCCC
      DECEDED
      EEEEEEEE
     FFFFFFFFFF
     GGGGGGGGGGG
    Heneghillimen
    пининини
   22222222222222222
   KKKKKKKKKKKKKKKKKKK
  рррррррррррррррррррррррррр
РРРРРРРРРРРРРРРРРРРРРРРРР
 MANAGARAMANAMANAMANAMAN
   KKKKKKKKKKKKKKKKKK
    222222222222222
    пининини
     1000000111111111111
     GGGGGGGGG
      FFFFFFFF
       EEEEEEE
       DODDDD
        CCC
        В
```

Q7- Write a program to print + pattern given below

Output: -

Q8 - Write a C++ program to print a triangle of prime numbers up to given number of lines of the triangle.

### Output: -

```
Norther, Head Control (1970) | Head No. | State | Head Head | State | Head Head | Paraditine for compatibility purposes. If you want to re-enable it, run 'Tree ort-housine Paraditine'.

PS DIVAS Code's of 'di-VAS Code's(-+\'; if ($?) ( g++ LoopeR.cpp -> LoopeR.cpp -> LoopeR.gp | // (LoopeR.gp -> LoopeR.gp -> LoopeR.gp -> LoopeR.gp | // (LoopeR.gp -> LoopeR.gp -> LoopeR.gp -> LoopeR.gp -> LoopeR.gp -> LoopeR.gp | // (LoopeR.gp -> LoopeR.gp -> L
```

Q9- Write a C++ program to check whether a Number can be expressed as a Sum of Two Prime Numbers.

### Output: -

```
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Normalist PowerShell detacted that you might be using a screen reader and has disabled PSReadLine for compatibility purposes. If you want to re-enable it, run "Import-Podular PSReadLine".

PS D:\VS Code) od "d:\VS Code\C++\" ; if ($?) { g++ Loope9.cpp -o Loope9 } ; if ($?) { .\Loope9 }

Enter a eve Integer : 17

No such contribution excitst

PS D:\VS Code\C++> od "d:\VS Code\C++\" ; if ($?) { g++ Loope9.cpp -o Loope9 } ; if ($?) { .\Loope9 }

Enter a eve Integer : 14

14 = 7 + ?

PS D:\VS Code\C++> od "d:\VS Code\C++\" ; if ($?) { g++ Loope9.cpp -o Loope9 } ; if ($?) { .\Loope9 }

Enter a eve Integer : 14

14 = 7 + ?

PS D:\VS Code\C++> od "d:\VS Code\C++\" ; if ($?) { g++ Loope9.cpp -o Loope9 } ; if ($?) { .\Loope9 }

Enter a eve Integer : 12

12 = 5 + ?

PS D:\VS Code\C++> ■
```

Q10- Write a C++ program to print a rectangle out of \*

### Output: -

## THANK YOU MA'AM AND PHYSICS WALLA