**SVKM’s NMIMS**

**Mukesh Patel School of Technology Management and Engineering, Mumbai**

**Department of Electronics & Telecommunication**



**Programming for Problem Solving (Exp 3-1)**

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| **Program: B. Tech Data Science (1st)** | **Batch: J1** |
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**Task 1:**

**A:**

**A.B. De Villiers**

**B:**

**i is smaller than 15**

**i is smaller than 12 too**

**C:**

**Correct**

**D:**

**Wrong**

**E:**

**No output**

**Task 2:**

#include <iostream>

using namespace std;

int main() {

int n;

cout << "Enter number: ";

cin >> n;

if(n%2 != 0) {

cout << "Weird";

}

else if(n >= 2 && n <= 5) {

cout << "Not Weird";

}

else if(n >= 6 && n <= 20) {

cout << "Weird";

}

else {

cout << "Not Weird";

}

return 0;

}

**Task 3:**

#include <iostream>

using namespace std;

int main() {

int Y;

cout << "Enter the year: ";

cin >> Y;

if((Y % 4 == 0 && Y % 100 != 0) || Y % 400 == 0) {

cout << "\nLeap Year\n";

}

else{

cout << "\nNot a Leap Year\n";

}

return 0;

}

**Task 4:**

#include <iostream>

using namespace std;

int main() {

int N;

cout << "Enter a number: ";

cin >> N;

if(N % 2 == 0 && N % 3 == 0 && N % 5 != 0) {

cout << "\nNumber is perfect.\n";

}

else{

cout << "\nNumber is not perfect.\n";

}

return 0;

}

**Home Work Questions:**

**1.**

#include <iostream>

using namespace std;

int main()

{

char ch;

cout<<"Please input a valid character (Alphabet): ";

cin>>ch;

//check for valid alphabet

if((ch>='A' && ch<='Z') || (ch>='a' && ch<='z'))

{

//check case and convert into opposite case

if(ch>='A' && ch<='Z')

ch=ch+32;

else if(ch>='a' && ch<='z')

ch=ch-32;

else

; //none

cout<<"converted character is: "<<ch<<endl;

}

else

{

cout<<"Entered character is not a valid alphabet!!!"<<endl;

}

return 0;

}