SVKM's NMIMS

Mukesh Patel School of Technology Management and Engineering, Mumbai

Programming for Problem Solving (Exp 2-1)

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Task 3:

```
#include <iostream>
using namespace std;

int main()
{
   char emp_number[8];
   char emp_name[25];
   char emp_address[50];
   char emp_mobile[10];
   cout<<"\n Enter the Employee Number: ";
   cin>>emp_number;
   cout<<"\n Enter the Employee Name: ";
   cin.getline(emp_name, 25);
   cin.getline(emp_name, 25);
   cout<<"\n Enter the Employee Address: ";
   cin.getline(emp_address, 50);
   cout<<"\n Enter the Contact Number: ";
   cin>>emp_mobile;
   cout<<"\n Employee Number: "<<emp_number<<endl;
   cout<<"\n Employee Name: "<<emp_name<<endl;
   cout<<"\n Employee Address: "<<emp_address<<endl;
   cout<<"\n Employee Contact Number: "<<emp_mobile<<endl;
   return 0;
}
```

Task 4:

```
#include <iostream>
using namespace std;
```

```
int main()
{
   int x,y,z,a,b;
   cout<<"\nEnter the value of x: ";
   cin>>x;
   cout<<"\nEnter the value of y: ";
   cin>>y;
   cout<<"\nEnter the value of z: ";
   cin>>z;
   a = (x*x)+(2*x*x*x)*(2*x);
   b = x+(y*y)+(z*z*z);
   cout<<"\na = "<<a<<"\nb = "<<b;
   return 0;
}
```

Task 5:

```
#include <iostream>
using namespace std;

int main()
{
   char rollno[8];
   float msub1,msub2,msub3,msub4,msub5,msum,score;
   cout<<"\nEnter Roll No: ";
   cin>>rollno;
   cout<<"\nEnter Marks in Subject 1: ";
   cin>>msub1;
   cout<<"\nEnter Marks in Subject 2: ";
   cin>>msub2;
   cout<<"\nEnter Marks in Subject 3: ";
   cin>>msub3;
   cout<<"\nEnter Marks in Subject 4: ";
   cin>>msub4;
```

```
   cout<<"\nEnter Marks in Subject 5: ";
   cin>>msub5;
   msum = msub1+msub2+msub3+msub4+msub5;
   score = (msum/500)*100;
   cout<<"\nRoll No: "<<rollno<<"\nPercentage Score:
"<<score<<"%"<<endl;
   return 0;
}
```

Task 6:

Missing Semicolon in Line 6 and 7

Task 7:

```
#include <iostream>
using namespace std;

int main()
{
   int num_1,num_2;
   cout<<"\nEnter Number 1: ";
   cin>>num_1;
   cout<<"\nEnter Number 2: ";
   cin>>num_2;
   cout<<"\n\nBefore Swapping \nNumber 1: "<<num_1<<"\nNumber 2:
"<<num_2<<endl;
   num_1 = num_1+num_2;
   num_2 = num_1-num_2;
   num_1 = num_1-num_2;
```

```
   cout<<"\nAfter Swapping \nNumber 1: "<<num_1<<"\nNumber 2:
"<<num_2<<endl;
   return 0;
}
```

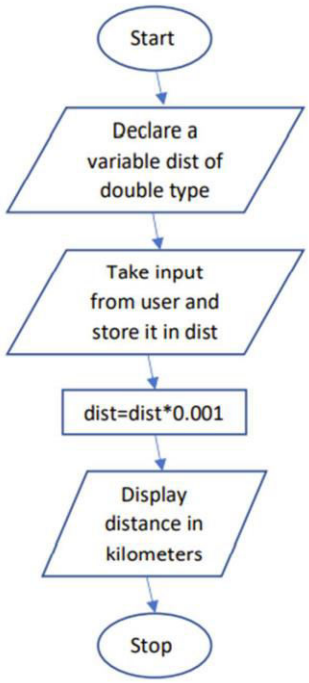
Homework Questions:

1.

Algorithm:

Step1	Start
Step2	Declare a variable dist of double type
Step3	Take input from user and store it in dist
Step4	dist=dist*0.001
Step5	Display distance in kilometers
Step6	Stop

Flowchart:



Code:

```
#include <iostream>

using namespace std;

int main() {
   float dist_m;
   cout << "Enter the distance (m): ";
   cin >> dist_m;
   cout << "\nDistance in Km: " << dist_m * 0.001;

   return 0;
}
```

2.

```
#include <iostream>

using namespace std;

int main() {
   float bs, hra, da, gs;

   cout << "Enter basic salary: ";
   cin >> bs;

   hra = bs * (5 / 100.00);
   da = bs * (15 / 100.00);

   gs = bs + hra + da;

   cout << "\nGross Salary: " << gs;

   return 0;
}
```