### Flow Control

### Assignment on if else and switch case statements

1. Write a program which take 3 inputs from user, value1, value2, operation (add = 1, sub = 2, mul = 3, div = 4, mod = 5 ) and perform operation on two values based on user input
2. Write switch case example with byte, short, int, char, enum, String, Integer, Byte, Short, Character expression.
3. Write a fall through switch case example
4. Write output for below programs.

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| --- | --- |
| if (20 > 18) {  System.out.println("20 is greater than 18");  } | ? |
| int x = 20;  int y = 18;  if (x > y) {  System.out.println("x is greater than y");  } | ? |
| public class Main {  public static void main(String[] args) {  int day = 4;  switch (day) {  case 1:  System.out.println("Monday");  break;  case 2:  System.out.println("Tuesday");  break;  case 3:  System.out.println("Wednesday");  break;  case 4:  System.out.println("Thursday");  break;  case 5:  System.out.println("Friday");  break;  case 6:  System.out.println("Saturday");  break;  case 7:  System.out.println("Sunday");  break;  }  }  } | ? |
| public class LeapYearExample {  public static void main(String[] args) {  int year=2020;  if(((year % 4 ==0) && (year % 100 !=0)) || (year % 400==0)){  System.out.println("LEAP YEAR");  }  else{  System.out.println("COMMON YEAR");  }  }  } | ? |
| public class IfElseIfExample {  public static void main(String[] args) {  int marks=65;    if(marks<50){  System.out.println("fail");  }  else if(marks>=50 && marks<60){  System.out.println("D grade");  }  else if(marks>=60 && marks<70){  System.out.println("C grade");  }  else if(marks>=70 && marks<80){  System.out.println("B grade");  }  else if(marks>=80 && marks<90){  System.out.println("A grade");  }else if(marks>=90 && marks<100){  System.out.println("A+ grade");  }else{  System.out.println("Invalid!");  }  }  } | ? |
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| public class SwitchMonthExample {  public static void main(String[] args) {  //Specifying month number  int month=7;  String monthString="";  //Switch statement  switch(month){  //case statements within the switch block  case 1: monthString="1 - January";  break;  case 2: monthString="2 - February";  break;  case 3: monthString="3 - March";  break;  case 4: monthString="4 - April";  break;  case 5: monthString="5 - May";  break;  case 6: monthString="6 - June";  break;  case 7: monthString="7 - July";  break;  case 8: monthString="8 - August";  break;  case 9: monthString="9 - September";  break;  case 10: monthString="10 - October";  break;  case 11: monthString="11 - November";  break;  case 12: monthString="12 - December";  break;  default:System.out.println("Invalid Month!");  }  //Printing month of the given number  System.out.println(monthString);  }  } | ? |
| public class SwitchVowelExample {  public static void main(String[] args) {  char ch='O';  switch(ch)  {  case 'a':  System.out.println("Vowel");  break;  case 'e':  System.out.println("Vowel");  break;  case 'i':  System.out.println("Vowel");  break;  case 'o':  System.out.println("Vowel");  break;  case 'u':  System.out.println("Vowel");  break;  case 'A':  System.out.println("Vowel");  break;  case 'E':  System.out.println("Vowel");  break;  case 'I':  System.out.println("Vowel");  break;  case 'O':  System.out.println("Vowel");  break;  case 'U':  System.out.println("Vowel");  break;  default:  System.out.println("Consonant");  }  }  } | ? |
| public class SwitchExample2 {  public static void main(String[] args) {  int number=20;  //switch expression with int value  switch(number){  //switch cases without break statements  case 10: System.out.println("10");  case 20: System.out.println("20");  case 30: System.out.println("30");  default:System.out.println("Not in 10, 20 or 30");  }  }  } | ? |
| public class SwitchStringExample {  public static void main(String[] args) {  //Declaring String variable  String levelString="Expert";  int level=0;  //Using String in Switch expression  switch(levelString){  //Using String Literal in Switch case  case "Beginner": level=1;  break;  case "Intermediate": level=2;  break;  case "Expert": level=3;  break;  default: level=0;  break;  }  System.out.println("Your Level is: "+level);  }  } | ? |
| public class NestedSwitchExample {  public static void main(String args[])  {  //C - CSE, E - ECE, M - Mechanical  char branch = 'C';  int collegeYear = 4;  switch( collegeYear )  {  case 1:  System.out.println("English, Maths, Science");  break;  case 2:  switch( branch )  {  case 'C':  System.out.println("Operating System, Java, Data Structure");  break;  case 'E':  System.out.println("Micro processors, Logic switching theory");  break;  case 'M':  System.out.println("Drawing, Manufacturing Machines");  break;  }  break;  case 3:  switch( branch )  {  case 'C':  System.out.println("Computer Organization, MultiMedia");  break;  case 'E':  System.out.println("Fundamentals of Logic Design, Microelectronics");  break;  case 'M':  System.out.println("Internal Combustion Engines, Mechanical Vibration");  break;  }  break;  case 4:  switch( branch )  {  case 'C':  System.out.println("Data Communication and Networks, MultiMedia");  break;  case 'E':  System.out.println("Embedded System, Image Processing");  break;  case 'M':  System.out.println("Production Technology, Thermal Engineering");  break;  }  break;  }  }  } | ? |
| public class JavaSwitchEnumExample {  public enum Day { Sun, Mon, Tue, Wed, Thu, Fri, Sat }  public static void main(String args[])  {  Day[] DayNow = Day.values();  for (Day Now : DayNow)  {  switch (Now)  {  case Sun:  System.out.println("Sunday");  break;  case Mon:  System.out.println("Monday");  break;  case Tue:  System.out.println("Tuesday");  break;  case Wed:  System.out.println("Wednesday");  break;  case Thu:  System.out.println("Thursday");  break;  case Fri:  System.out.println("Friday");  break;  case Sat:  System.out.println("Saturday");  break;  }  }  }  } | ? |
| public class WrapperInSwitchCaseExample {  public static void main(String args[])  {  Integer age = 18;  switch (age)  {  case (16):  System.out.println("You are under 18.");  break;  case (18):  System.out.println("You are eligible for vote.");  break;  case (65):  System.out.println("You are senior citizen.");  break;  default:  System.out.println("Please give the valid age.");  break;  }  }  } | ? |