Name- Chhavi Goyal

Section- 1(A) AIML

University RollNo.-2215500050

**Switch Case**

Ques.1 Write a C program to print day of week name using switch case.

Sol.

#include <stdio.h>

int main()

{

int day;

printf("Enter the day number\n");

scanf("%d",&day);

switch(day){

case 1:

printf("Monday");

break;

case 2:

printf("Tuesday");

break;

case 3:

printf("Wednesday");

break;

case 4:

printf("Thrusday");

break;

case 5:

printf("Friday");

break;

case 6:

printf("Saturday");

break;

case 7:

printf("Sunday");

break;

default:

printf("Enter valid value");

}

return 0;

}

Ques.2 Write a C program to print total number of days in a month using switch case.

Sol.

#include <stdio.h>

int main()

{

int month;

printf("Enter the number of month\n");

scanf("%d",&month);

switch(month){

case 1:

case 3:

case 5:

case 7:

case 8:

case 10:

case 12:

printf("31 Days");

break;

case 2:

printf("28 Days");

break;

case 4:

case 6:

case 9:

case 11:

printf("30 Days");

break;

default:

printf("Enter valid value");

}

return 0;

}

Ques.3 Write a C program to check whether an alphabet is vowel or consonant using switch case.

Sol.

#include <stdio.h>

int main()

{

char ch;

printf("Enter a character\n");

scanf("%c",&ch);

switch(ch){

case 'a':

case 'A':

case 'e':

case 'E':

case 'i':

case 'I':

case 'o':

case 'O':

case 'u':

case 'U':

printf("Vowel");

break;

default:

printf("Consonant");

}

return 0;

}

Ques.4 Write a C program to find maximum number between 2 numbers using switch case.

Sol.

#include <stdio.h>

int main()

{

int a,b;

printf("Enter two numbers\n");

scanf("%d%d",&a,&b);

switch(a>b){

case 1:

printf("%d is maximum",a);

break;

case 0:

printf("%d is maximum",b);

}

return 0;

}

Ques.5 Write a C program to check whether a number is even or odd using switch case.

Sol.

#include <stdio.h>

int main()

{

int a;

printf("Enter a number\n");

scanf("%d",&a);

switch(a%2==0){

case 1:

printf("%d is even",a);

break;

case 0:

printf("%d is odd",a);

}

return 0;

}

Ques.6 Write a C program to check whether a number is positive, negative or zero using switch case.

Sol.

#include <stdio.h>

int main()

{

int a;

printf("Enter a number\n");

scanf("%d",&a);

switch(a>0){

case 1:

printf("positive number");

break;

case 0:

switch(a==0){

case 1:printf("Zero");

break;

case 0:printf("Negative");

break;

}

}

return 0;

}

Ques.7 Write a C program to find roots of a quadratic equation using switch case.

Sol.

#include <stdio.h>

#include <math.h>

int main()

{

float a, b, c;

float root1, root2, i;

float d;

printf("Enter values of a, b, c of quadratic equation (aX^2 + bX + c): ");

scanf("%f%f%f",&a, &b, &c);

d = (b \* b) - (4 \* a \* c);

switch(d>0){

case 1:

root1 = (-b + sqrt(d)) / (2 \* a);

root2 = (-b - sqrt(d)) / (2 \* a);

printf("%.2f and %.2f",root1,root2);

break;

case 0:

switch(d<0){

case 1:

root1 = root2 = -b / (2 \* a);

i= sqrt(-d) / (2 \* a);

printf("%.2f + i%.2f and %.2f - i%.2f",root1, i, root2, i);

break;

case 0:

root1 = root2 = -b / (2 \* a);

printf("%.2f and %.2f", root1, root2);

break;

}

}

return 0;

}

Ques.8 Write a C program to create simple calculator using switch case.

Sol.

#include <stdio.h>

int main() {

char op;

int first, second;

printf("Enter an operator (+, -, \*, /): ");

scanf("%c", &op);

printf("Enter two operands: ");

scanf("%d %d", &first, &second);

switch (op) {

case '+':

printf("%.1d + %.1d = %.1d", first, second, first + second);

break;

case '-':

printf("%.1d - %.1d = %.1d", first, second, first - second);

break;

case '\*':

printf("%.1d \* %.1d = %.1d", first, second, first \* second);

break;

case '/':

printf("%.1d / %.1d = %.1d", first, second, first / second);

break;

default:

printf("Error! operator is not correct");

}

return 0;

}