

Control Flow

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if-else

```
if (a == 'd')
{
    printf ("Nalini is dumb");
}
else
{
    printf ("Nalini is stupid");
}
```

- Braces not required for single statements

else-if

```
if (a == 'd')
    printf ("Nalini is dumb");
else if (a == 's')
    printf ("Nalini is stupid");
else if (a == 'f')
    printf ("Nalini is a fool");
else
    printf ("Nalini can't think");
```

switch

```
switch (a)
{
    case 'd':
        printf ("Nalini is dumb");
        break;
    case 's':
        printf ("Nalini is stupid");
        break;
    case 'f':
        printf ("Nalini is a fool");
        break;
    default:
        printf ("Nalini can't think");
        break;
}
```

Puzzle

- What is the output?

```
m = 1;
switch (m)
{
case 0:
    printf ("Zero\n");
case 1:
    printf ("One\n");
    m++;
case 2:
    printf ("Two\n");
case 3:
    printf ("Three\n");
}
printf ("m = %d\n", m);
```

while

```
int a[10] = {1,2,3,4,5,6,7,8,9,10};  
int i = 0, sum = 0;  
while (i < 5)  
{  
    sum = sum + a[i];  
    i++;  
}  
printf("Sum = %d", sum);
```

for

```
int a[10] = {1,2,3,4,5,6,7,8,9,10};

int i, sum = 0;
for (i = 0; i < 5; i++)
{
    sum = sum + a[i];
}
printf("Sum = %d", sum);
```

Puzzle

- What does this code snippet do?

```
for (i = 0, j = strlen (s) - 1; i < j; i++, j--)  
{  
    c = s[i];  
    s[i] = s[j];  
    s[j] = c;  
}
```


do-while

```
do
{
    scanf("%c", &ch);
}
while (ch != 'z');
```

break

```
for (i = 0; i < n; i++)  
{  
    if (a[i] < 0)  
        break;  
    sum = sum + a[i];  
}
```

continue

```
for (i = 0; i < n; i++)  
{  
    if (a[i] < 0)  
        continue; /*Skip negative no.s */  
    sum = sum + a[i];  
}
```