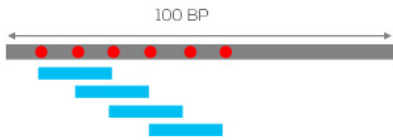


ALIGNMENTS IN BOWTIE 2

```
@HWI-ST974:58:C059FACXX:2:1201:10589:110434 1:N:0:TGACCA
TGCACACTGAACGTGCCGFGCCCCAAAATCTGTCAAATGAATTTAGG
ACGTG
```

MULTISEED ALIGNMENT (UNGAPPED)

SEED LENGTH: 16 NT, EVERY 10 NT
MISMATCHES: 0



```
@PG ID:bowtie2 PN:bowtie2 VN:2.2.1 CL:"/
read1 16 chr10 6 255 100M * 0 0
read2 16 chr7 4 255 99M1S * 0 0
read3 0 chr7 4 31 100M * 0 0
read4 256 chr10 4 31 100M * 0 0
read5 0 chr5 38 37 2S90M8S * 0 0
read6 256 chr6 40 37 3D97M * 0 0
read7 0 chr1 40 38 100M * 0 0
```

Bowtie2 is a fast alignment algorithm based on the FM-index approach on seeds substrings to align them to the genome.

For more info please see:

Langmead B, Salzberg SL. Fast gapped-read alignment with Bowtie 2. Nat Methods. 2012;9(4):357-359. doi:10.1038/nmeth.1923.

This job takes reads in fq, fa files, aligns these onto the reference genome and gives mapping result in SAM format. Each row of the SAM file contains input read name, reference read name, position on the reference read and number of mapped/skipped/inserted/deleted positions